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Water Resources Data for Alaska

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT AK-79-1

WATER YEAR 1979

Prepared in cooperation with the State of Alaska
and with other agencies

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U.S. DEPARTMENT OF THE INTERIOR
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UNITED STATES DEPARTMENT OF THE INTERIOR

Cecil D. Andrus, Secretary

GEOLOGICAL SURVEY

H. William Menard, Director

For information on the water program in Alaska write to
District Chief, Water Resources Division
U.S. Geological Survey
733 West Fourth Avenue, Suite 400
Anchorage, Alaska 99501

1980

PREFACE

This report was prepared by personnel of the Alaska district of the Water Resources Division of the U.S. Geological Survey under the supervision of Harry Hulsing, District Chief, and W. H. Robinson, Regional Hydrologist, Western Region. It was done in cooperation with the State of Alaska and with other agencies.

This report is one of a series issued by State. General direction for the series is by Philip Cohen, Chief Hydrologist, U.S. Geological Survey, and Robert Dingman, Assistant Chief Hydrologist for Scientific Publications and Data Management.

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Water resources data for the 1979 water year for Alaska consists of records of stage, discharge, and water quality of streams; stage and water quality of lakes; and water levels and water quality in wells and springs. This report contains discharge records for 111 gaging stations; stage only records for 2 gaging stations; water quality for 58 stations; and water levels for 30 observation wells. Also included are 62 low-flow, 89 crest-stage, and 24 water-quality partial-record stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements of discharge, lake stage, or water quality. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Alaska.

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[Letter after station name designates type of data: (d) discharge, (c) chemical, (b) biological, (m) microbiological, (t) water temperature, (s) sediment]

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[*Letter after station name designates type of data: (d) discharge, (c) chemical, (b) biological, (m) microbiological, (t) water temperature, (s) sediment*]

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WATER RESOURCES DATA FOR ALASKA, 1979

INTRODUCTION

Water resources data for the 1979 water year for Alaska consist of records of stage, discharge, and water quality of streams; stage and water quality of lakes; water levels and water quality of ground-water wells; and water quality of springs. This volume contains records for water discharge at 111 gaging stations; stage only at 2 gaging stations; water quality at 58 gaging stations; and water levels for 30 observation wells. Also included are data for 62 low-flow, 89 crest-stage, and 24 water-quality partial-record stations and 20 lakes. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Alaska.

Records of discharge and stage of streams, stage of lakes, chemical quality, water temperatures, and suspended sediment were first published in U.S. Geological Survey water-supply papers. Through September 30, 1960, these data were published in seven water-supply papers entitled, "Quantity and Quality of Surface Waters of Alaska" (through 1950, 1951-53, 1954-56, 1957, 1958, 1959, 1960). Since 1960, streamflow records and related data were published in a five-year series of water-supply papers for 1961-65 and 1966-70 entitled, "Surface Water Supply of the United States." Water-quality records were published in a water-supply paper entitled "Quality of Surface Waters of Alaska, 1961-63" and after then until 1970 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1949 to 1974 in a series of water-supply papers entitled, "Ground-Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report AK-79-1." For archiving and general distribution, the reports for water years 1971-74 are also identified as water-data reports. These water-data reports are for sale, in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the district chief at the address given on the back of the title page or by telephone (518) 472-2457.

COOPERATION

The U.S. Geological Survey and organizations of the State of Alaska have had cooperative agreements since 1958 for the systematic collection of streamflow records, water-quality records, and ground-water levels. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Alaska Department of Natural Resources, R. E. LeResche, commissioner.

Alaska Department of Fish and Game, R.O. Skoog, commissioner.

Alaska Department of Transportation and Public Facilities in cooperation with the Federal Highway Administration, U.S. Department of Transportation, R. Ward, commissioner.

Alaska Department of Environmental Conservation, E. W. Mueller, commissioner.

Alaska Power Authority, E. P. Yould, executive director.

Capitol Site Planning Commission, R. L. Evans, administrative director.

Municipality of Anchorage, G. M. Sullivan, mayor.

Kenai Peninsula Borough, D. E. Gilman, mayor.

Fairbanks North Star Borough, J. A. Carlson, mayor.

City and Borough of Juneau, M. Winegar, city manager.

Thomas Bay Power Commission, R. L. Ballard, president.

Assistance in the form of funds or services was given by the following federal agencies for information published in this report: Corps of Engineers, U.S. Army, for 26 gaging stations and 5 water-quality stations; Forest Service, U.S. Department of Agriculture, for 14 gaging stations and 12 water-quality stations; Alaska Power Administration, U.S. Department of Energy, for 3 gaging stations; Soil Conservation Service, U.S. Department of Agriculture, for 3 gaging stations; and Environmental Protection Agency, for water-quality data.

Organizations that supplied data are acknowledged in station descriptions.

ACKNOWLEDGMENT

Alaska district personnel who contributed significantly to the collection and preparation of the data in this report are too numerous to mention individually. However, these people were in the following groups: Hydrology Section, R. D. Lamke, chief; Anchorage Subdistrict, R. S. George, chief; Fairbanks Subdistrict, Bruce Parks, chief; and Juneau Subdistrict, V. K. Berwick, chief.

HYDROLOGIC CONDITIONS

Streamflow in Alaska for the 1979 water year was excessive (in the highest 25 percent for the period of record) at one-half of the long-term gaging stations (those stations with ten or more years of record). The highest mean annual discharge during the period of record occurred at about ten percent of the stations. Most of these stations were in Southeast Alaska (at Skagway and on Chichagof Island); the other stations with new maximum annual discharges were Myrtle Creek near Kodiak and Snake River near Nome. Other stations with excessive or above normal annual flows were in Southeast Alaska (except the southernmost portion), South-central Alaska, and in those areas in the Interior that have streams that originate in glaciers. Streams with generally below normal flows for the year were those in Interior Alaska that have little runoff from glaciers and those in the southernmost portion of Southeast Alaska. No outstanding or widespread floods occurred during the year.

In Southeast Alaska, streamflow during October was excessive at all stations (and the highest of record at about two-thirds of the stations) because of rains throughout the month. It was a very rare day that the weather stations in Southeast Alaska did not record some precipitation. Runoff declined until February when all of the stations had below normal or deficient flows. Runoff in the April through September period varied. Most streams on the islands had below normal or deficient flows and glacier-fed streams on the mainland had above normal or excessive flows.

Excessive October mean flows were also experienced in South-central streams that have a maritime climate. However, most of the streams further from the coast had below normal or deficient flows in October. Wintertime temperatures mostly were above normal; this resulted in above normal or excessive streamflow during the winter in most streams that are ice covered throughout the winter and with headwaters at higher altitudes. April flows generally were above normal or excessive prior to breakup. There was a larger than normal snowpack at higher altitudes that resulted in above normal or excessive snowmelt runoff in the May through July period. Streamflow in South-central Alaska decreased to more normal levels because of the lack of precipitation in most of August and the first half of September.

In the rest of Alaska, October streamflows were generally below normal and in a few cases were deficient. The mild winter generally resulted in above normal or excessive flows during the winter months. Flows throughout the rest of the year generally were normal or above normal. However, summer flows in non-glacial streams tributary to the Tanana River were usually below normal with the exception of during July, which had excessive precipitation. Breakup in these streams occurred earlier than usual which resulted in record or near-record monthly mean discharges during April.

Monthly and annual mean discharge for 1979 is compared in figure 3 with median monthly and annual discharge for the period of record at six representative gaging stations throughout the state.

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined as follows. See also the table for converting English Units to International System of units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer, tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 milliliters (mL) of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on M-enterrococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Benthic organisms (invertebrates) are animals inhabiting the bottom of an aquatic environment. They include a number of different types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. They are frequently used as indicators of environmental quality because many have restricted mobility during their aquatic life phase, as well as a relatively long lifespan which allows for response to prevailing and changing water-quality conditions. Many benthic organisms inhabit specific types of environments which, if changed, result in changes in the composition of the benthic community.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and the ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material".

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters or liters (L).

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, or about 646,000 gallons or 2,447 cubic meters.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (FT^3/S, or ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45 micrometer membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream or lake where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO^3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters (m^2), acres, or hectares. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliters (mL) or liters (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Partial-record station is a particular site where limited streamflow or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay..........	0.00024 - 0.004	Sedimentation.
Silt..........	.004 - .062	Sedimentation.
Sand..........	.062 - 2.0	Sedimentation or sieve.
Gravel........	2.0 - 64.0	Sieve.

The particle-size distribution given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Picocuri (PC, pCi) is one trillionth (1×10^{12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells/mL of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells/mL of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Runoff in inches (IN, in) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended-sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that is discharged in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Suspended-sediment load is quantity of suspended sediment passing a section in a specified period.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content in the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The use of artificial substrates simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multi-plate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total".

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata* is the following:

Kingdom	Animal
Phylum	Arthropoda
Class	Insecta
Order	Ephemeroptera
Family	Ephemeridae
Genus	*Hexagenia*
Species	*Hexagenia limbata*

Tons per acre-foot indicates the dry weight of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day.

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total". (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

WRD is used as an abbreviation for "Water-Resources Data" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published before 1975.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in the front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 15303600, which appears just to the left of the station name, includes the 2-digit part number "15" plus the 6-digit downstream order number "303600."

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The 8-digit downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The well and miscellaneous site numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the wells or other sites within a 1-second grid. See figure 1 below.

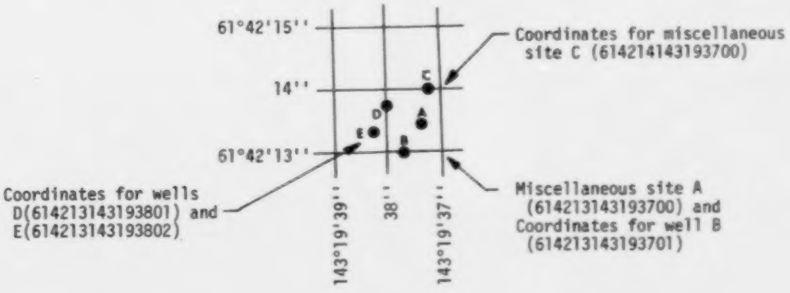

61°42'15''
Coordinates for miscellaneous site C (614214143193700)
C
14''
D
A
E
B
61°42'13''
Coordinates for wells D(614213143193801) and E(614213143193802)
143°19'39''
38''
143°19'37''
Miscellaneous site A (614213143193700) and Coordinates for well B (614213143193701)

Figure 1. System for numbering wells and miscellaneous sites (latitude and longitude)

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distributuon of pesticides in streams where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams and stage of lakes. In addition, observations of factors affecting the stage-discharge relation, weather records, and other information are used to supplement base data in determining the daily flow. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At most stream-gaging stations in Alaska the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed or estimated on the basis of the available gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge. This happens when the recorder is stopped for the winter or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams a table showing the daily discharge and monthly and yearly discharge is given. Tables of daily mean gage heights are included for some streamflow stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging stations gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge. The location of the gaging station and the drainage area are obtained from the most accurate maps available. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use, the datum of the present gage referred to National Geodetic Vertical Datum, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS" on page 5.

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; It is not given for stations having fewer than 5 complete years of record. Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge, it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

The daily table for stream-gaging stations gives the mean discharge for each day and is by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if most of the flow is from a spring. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharges are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source of indefinite stage-discharge relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

Data collected at partial-record stations follow the information for continuous record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations. Lake-level data collected at miscellaneous selected lakes are tabulated also.

Accuracy of field data and computed results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good" within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft^3/s; to tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, flow from springs, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions or for other changes incident to use and control.

Other data available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, and rating tables, is filed in the subdistrict offices at Anchorage, Fairbanks, and Juneau for their areas of responsibility. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

EXPLANATION OF WATER QUALITY RECORDS

Collection and examination of data

Surface water samples for analyses usually are collected at or near gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, pH, dissolved oxygen, water temperature, sediment discharge, etc.); extremes for the period of daily record; extremes for the current year; and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, date of sampling and/or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on a following page.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. Large streams have a small diel temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, maximum and minimum temperatures for each day are published.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Only ground-water level data from a basic network of observation wells are published herein. This basic network consists of observation wells located in the most important aquifers, and therefore the most significant data are obtained from the fewest wells. (See figure 4.)

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs. (See figure 1.)

The local number used herein is partly based on the rectangular subdivision of public lands. The first two letters indicate the principal meridian and the quadrant formed by the intersection of the base line and the principal meridian. The first three digits indicate the township in which the well is located, the next three digits the range, and the following two digits the section. Letters following the section number indicate the quarter section, the quarter-quarter section, and so forth to the fourth order subdivision. Each of these subdivisions is lettered counter-clockwise, from the northeast corner. Each well within the smallest order of subdivision is then given a sequential number. Finally, each well within a section is assigned a sequential map number using the last three digits. Thus, SB00601115BCAD1 indicated the Seward meridian (S), the northwest quadrant (B), township 6 north, range 11 west, section 15; and the well is in the SE¼ of the NE¼ of the SW¼ of the NW¼ of the section (BCAD). It was the first well in the 2.5 acre "D" subdivision assigned a sequential number (1). The next three digits, 001, indicate the sequence in which a well was located on a map. Thus 001 indicates it was the first well plotted in the one square mile section. The next space is left blank. The last five numbers, such as 00114, are the Alaska register number, that is provided for continuity with older reports. Therefore, the local number is SB00601115BCAD1001 00114.

Measurements are made in many types of wells, under varying conditions of access and at different temperatures; hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet referred to either National Geodetic Vertical Datum (NGVD) or land-surface datum (lsd). National Geodetic Vertical Datum is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom). Daily water levels are reported for a few wells that may have significant fluctuations between every fifth day. The extreme water levels recorded during the year are reported as the highest water level (HWL) and as the lowest water level (LWL).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet or if an electric water sensor must be used, the error in determining the absolute value of the total depth to water may be five or more hundredths of a foot. However, the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. Accordingly, most measurements are reported to a hundredth of a foot, but a few are given only to a tenth of a foot.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-four manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.
5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
5-A3. *Methods for analysis of organic substances in water*, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples,* edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments,* by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-C1. *Laboratory theory and methods for sediment analysis,* by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments,* by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water,* by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

8-A1. *Methods of measuring water levels in deep wells,* by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.

8-B2. *Calibration and maintenance of vertical-axis type current meters,* by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

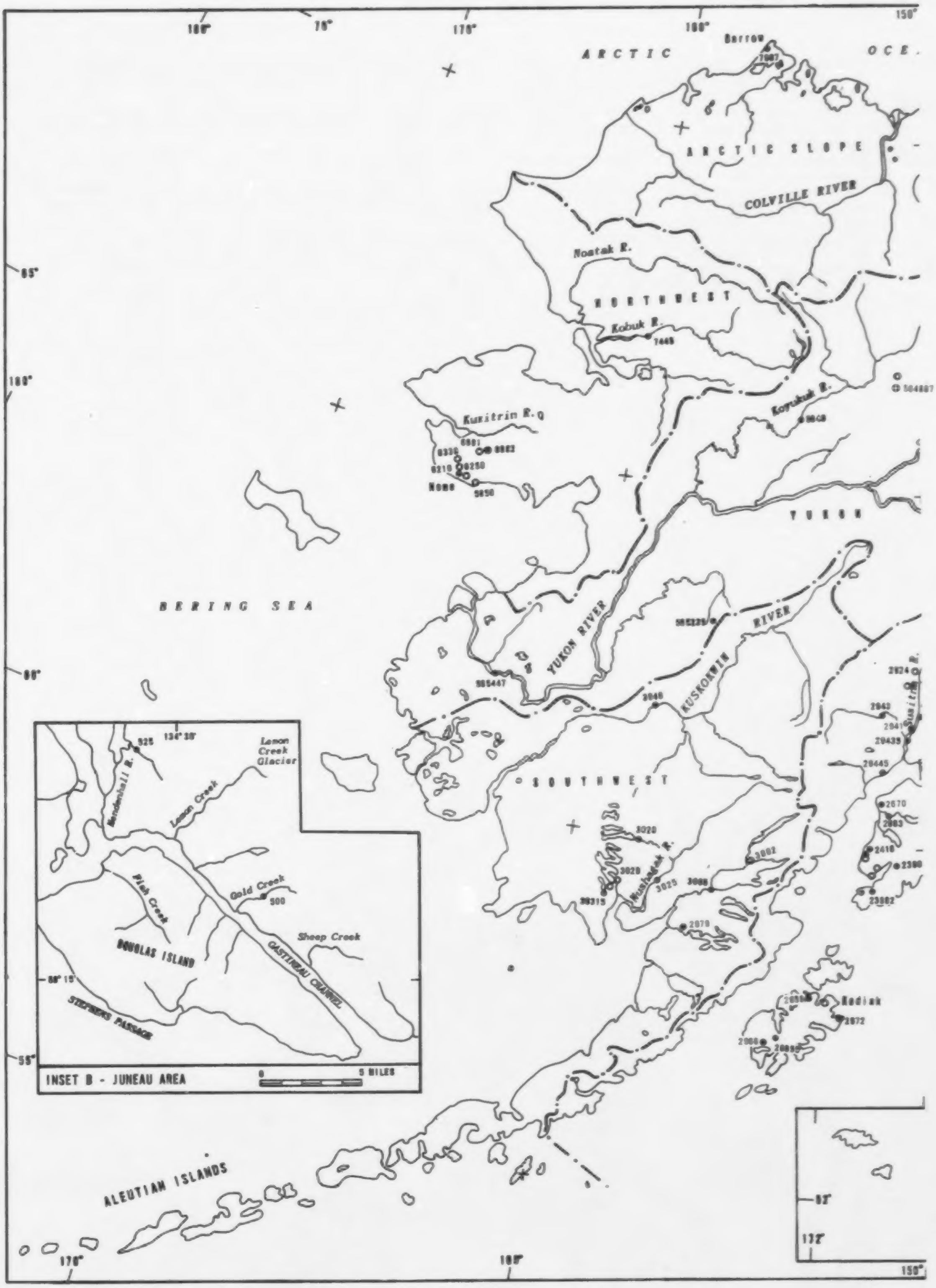


Figure 2.--Map showing locations of gaging stations (west of 150° longitude).

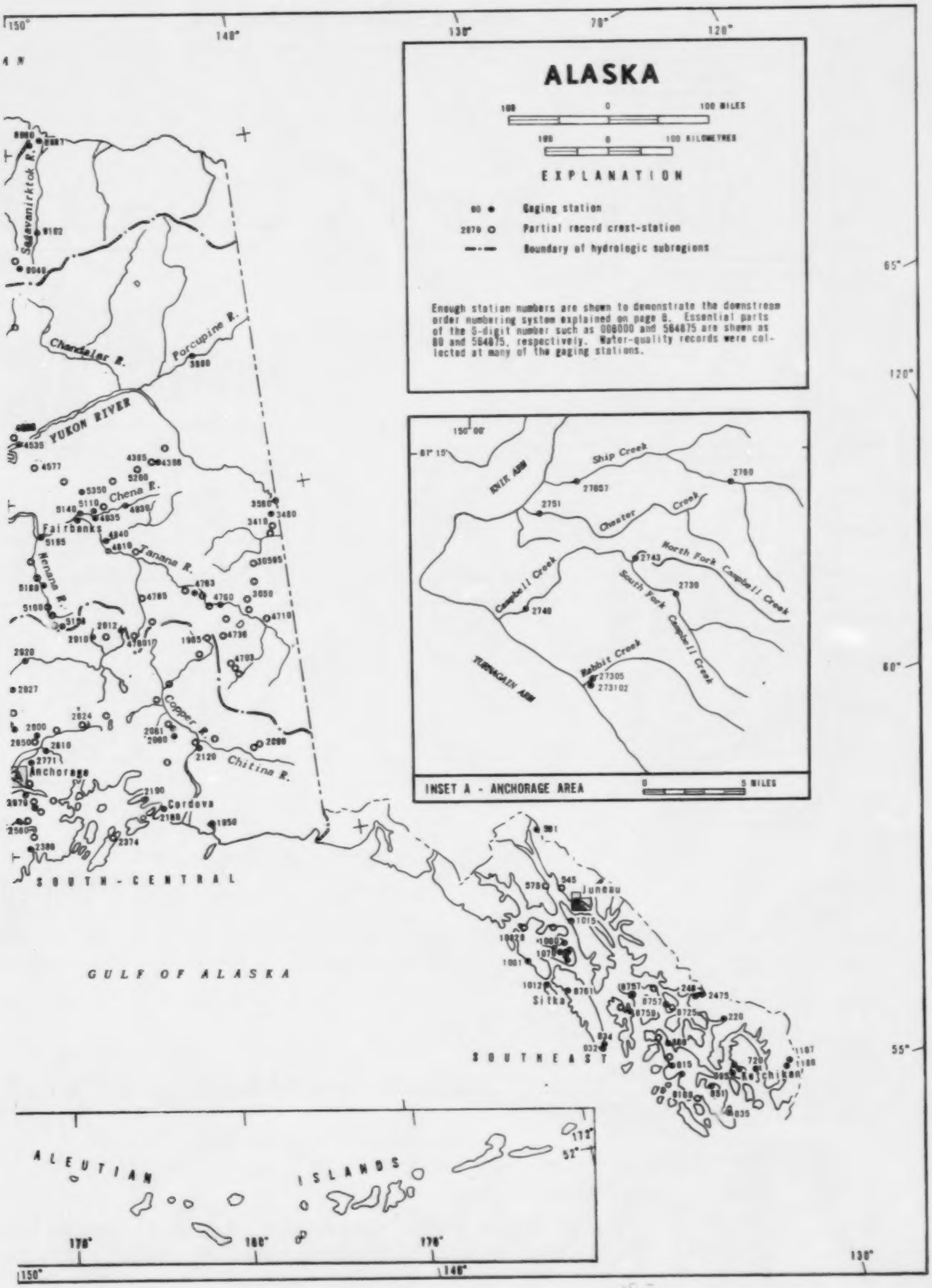


Figure 2.--Continued (east of 150° longitude).

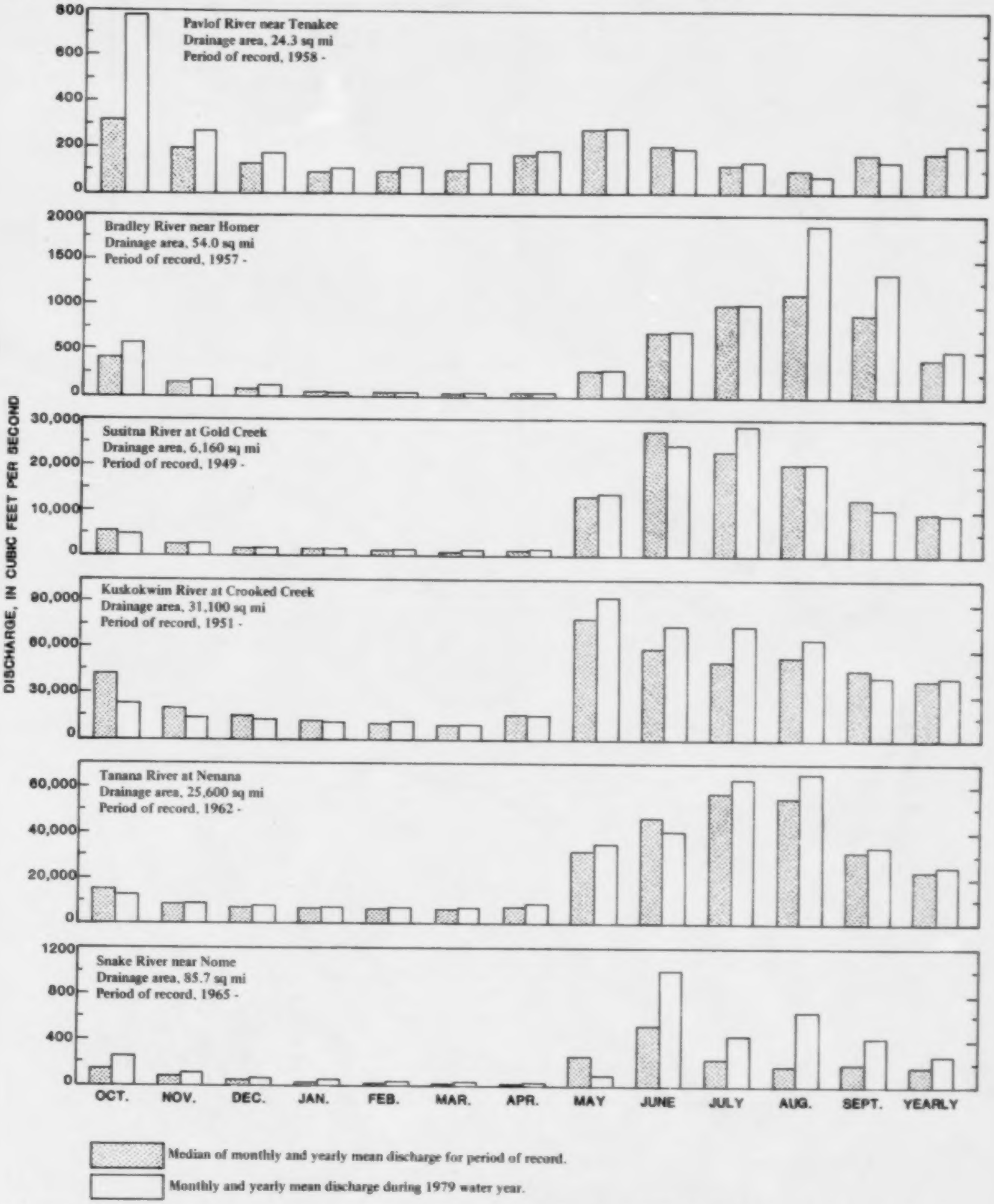


Figure 3.--Discharge during 1979 water year compared with mean discharge for period of record for six long-term representative gaging stations.

SOUTHEAST ALASKA

15011870 WHITE CREEK NEAR KETCHIKAN

LOCATION.--Lat 55°24'51", long 130°27'38", in NW¼NW¼ sec.36, T.74 S., R.98 E., Hydrologic Unit 1906000, in Tongass National Forest, on left bank 0.5 mi (0.8 km) upstream from mouth and 45 mi (72 km) east of Ketchikan.

DRAINAGE AREA.--2.70 mi² (11.25 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,250 ft (380 m), from topographic map.

REMARKS.--Water-discharge records good. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 503 ft³/s (14.2 m³/s) Oct. 11, 1977, gage height, 3.53 ft (1.076 m), from rating curve extended above 330 ft³/s (9.3 m³/s); minimum daily, 2.2 ft³/s (0.062 m³/s) Jan. 5, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 114 ft³/s (3.23 m³/s) Mar. 6, gage height, 2.17 ft (0.661 m); minimum daily, 3.2 ft³/s (0.091 m³/s) Feb. 26, 28, Mar. 1, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	56	17	5.0	3.6	3.2	5.5	46	48	38	40	5.4
2	23	54	32	4.8	3.4	11	5.2	45	48	44	24	16
3	22	45	36	4.7	3.4	63	5.1	53	48	43	21	12
4	22	28	22	4.5	5.6	46	5.9	51	49	39	18	9.6
5	20	39	18	4.5	5.7	112	10	47	48	44	16	11
6	19	56	14	4.5	5.3	97	8.7	39	48	44	16	12
7	16	41	13	4.4	4.9	53	7.6	38	47	41	15	9.4
8	21	26	24	4.3	4.4	23	7.3	43	46	40	13	8.5
9	23	21	24	4.4	4.1	15	7.1	29	49	41	12	17
10	23	17	16	4.2	4.0	12	7.3	40	48	42	12	29
11	23	15	13	4.1	3.8	14	7.8	50	44	41	10	15
12	22	13	14	4.1	3.8	17	8.5	32	41	36	10	40
13	23	12	35	3.9	3.7	13	5.6	31	38	29	9.6	35
14	22	12	15	4.2	3.7	12	5.2	31	43	30	9.5	32
15	22	27	13	4.6	3.6	13	4.7	30	47	28	8.5	22
16	16	16	11	4.5	3.6	11	4.6	32	46	30	7.6	36
17	17	12	9.5	4.8	3.5	9.4	5.4	45	46	33	7.3	45
18	23	9.7	8.7	4.9	3.5	8.1	5.7	41	46	36	7.2	39
19	21	9.3	8.5	4.4	3.5	8.8	6.6	37	46	31	7.1	22
20	23	8.8	8.2	4.2	3.4	9.0	8.3	37	46	31	6.8	14
21	23	7.5	7.9	4.1	3.4	9.5	9.5	37	42	43	6.9	12
22	24	7.1	7.6	4.7	3.4	10	13	44	41	44	6.5	9.8
23	22	8.4	7.2	6.0	3.3	12	15	50	44	35	6.0	8.7
24	33	18	6.8	5.7	3.3	13	20	49	44	27	5.7	17
25	45	27	6.7	4.8	3.4	3.2	26	51	45	25	5.4	26
26	38	32	6.5	4.7	3.2	9.6	30	50	49	23	5.5	29
27	30	62	6.3	4.3	3.3	8.1	40	49	46	22	5.4	46
28	26	42	6.0	4.0	3.2	7.3	48	46	44	19	4.9	48
29	20	26	5.8	4.0	---	6.3	50	45	45	15	4.7	32
30	50	20	5.5	3.9	---	5.9	49	46	46	22	4.3	42
31	48	---	5.3	3.8	---	5.4	---	48	---	35	4.6	---
TOTAL	782	767.8	423.5	139.0	107.0	640.8	432.6	1312	1368	1051	330.5	700.4
MEAN	25.2	25.6	13.7	4.48	3.82	20.7	14.4	42.3	45.6	33.9	10.7	23.3
MAX	50	62	36	6.0	5.7	112	50	53	49	44	40	48
MIN	16	7.1	5.3	3.8	3.2	3.2	4.6	29	38	15	4.3	5.4
CFSM	9.33	9.48	5.07	1.66	1.42	7.67	5.33	15.7	16.9	12.6	3.96	8.63
IN.	10.77	10.57	5.83	1.91	1.47	8.83	5.96	18.07	18.84	14.48	4.55	9.65
AC-FT	1550	1520	840	276	212	1270	858	2600	2710	2080	656	1390

CAL YR 1978 TOTAL 8543.1 MEAN 23.4 MAX 300 MIN 2.2 CFSM 8.67 IN 117.66 AC-FT 16950
WTR YR 1979 TOTAL 8054.6 MEAN 22.1 MAX 112 MIN 3.2 CFSM 8.19 IN 110.93 AC-FT 15980

15011870 WHITE CREEK NEAR KETCHIKAN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 and 1979.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1978 to August 1979.
WATER TEMPERATURES: February to April 1978 and September 1978 to September 1979.

INSTRUMENTATION.--Water-quality monitor since Feb. 2, 1978.

REMARKS.--Missing temperature record during Dec. 12 to Feb. 20 was due to probe freezing. The other missing periods of record for both specific conductance and temperature were caused by malfunctioning recorder.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 82 micromhos/cm Jan. 13, 14, 1979; minimum recorded, 10 micromhos/cm Oct. 31 and Nov. 1, 1978.
WATER TEMPERATURES: Maximum recorded, 16.0°C July 31 and Aug. 3, 1979, but may have been higher during period of missing record during July and August; minimum, 0.0°C many days during winter periods.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT											
24...	1130	1/1028	2/80020	40	27	--	5.0	--	--	9	8
24...	1131	--	3/9815	40	--	--	--	--	<25	--	--
NOV											
15...	1010	--	--	46	13	--	1.0	--	--	--	--
FEB											
20...	1430	1028	80020	2.3	86	7.5	1.0	--	--	31	26
20...	1431	--	9815	2.3	--	--	--	--	<25	--	--
MAY											
11...	0930	--	80020	43	22	6.5	1.5	12.8	--	7	5
11...	0931	--	9815	43	--	--	--	--	<25	--	--
JUL											
28...	1400	--	80020	18	44	6.2	7.5	11.2	--	15	12
SEP											
01...	1430	--	80020	5.5	108	7.1	9.0	--	--	36	29

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT											
24...	3.2	.2	.8	.2	--	8.8	.8	.1	5.3	20	20
24...	--	--	--	--	--	--	--	--	--	--	--
NOV											
15...	--	--	--	--	--	--	--	--	--	--	--
FEB											
20...	12	.2	1.0	.2	--	29	.5	.1	6.7	51	53
20...	--	--	--	--	--	--	--	--	--	--	--
MAY											
11...	2.7	.0	1.2	.3	--	4.1	.7	.1	2.9	14	13
11...	--	--	--	--	--	--	--	--	--	--	--
JUL											
28...	5.4	.3	1.0	--	3	11	.4	.1	4.7	36	24
SEP											
01...	14	.2	1.3	.3	--	38	.5	.1	6.2	68	65

1/ U.S. GEOLOGICAL SURVEY
2/ U.S. GEOLOGICAL SURVEY
3/ ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

15011870 WHITE CREEK NEAR KETCHIKAN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)
OCT											
24...	.01	.00	.01	.01	.10	.11	.12	.000	.00	0	--
24...	--	--	--	--	--	--	--	--	--	--	ND
NOV											
15...	--	--	--	--	--	--	--	--	--	--	--
FEB											
20...	.03	.00	.03	.01	.00	.00	.03	.000	.03	0	--
20...	--	--	--	--	--	--	--	--	--	--	ND
MAY											
11...	.00	.02	.02	.00	.04	.04	.06	.000	.00	0	--
11...	--	--	--	--	--	--	--	--	--	--	ND
JUL											
28...	.00	.02	.01	.01	.20	.21	.22	.010	.01	1	--
SEP											
01...	.02	.00	.02	.02	.08	.10	.12	.010	.00	0	--

DATE	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)
OCT										
24...	--	0	--	--	0	--	--	2	--	--
24...	1	--	<1	0	--	<5	2	--	ND	13
NOV										
15...	--	--	--	--	--	--	--	--	--	--
FEB										
20...	--	0	--	--	10	--	--	1	--	--
20...	4	--	<1	0	--	ND	4	--	<5	6
MAY										
11...	--	1	--	--	0	--	--	2	--	--
11...	6	--	<1	0	--	ND	6	--	ND	6
JUL										
28...	--	0	--	--	0	--	--	2	--	--
SEP										
01...	--	0	--	--	20	--	--	1	--	--

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	MOLYBDENUM, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT										
24...	30	--	7	--	--	20	.0	10	--	--
24...	--	2200	--	<5	4	--	--	--	<50	25
NOV										
15...	--	--	--	--	--	--	--	--	--	--
FEB										
20...	50	--	7	--	--	20	.1	16	--	--
20...	--	320	--	ND	2	--	--	--	<50	31
MAY										
11...	50	--	24	--	--	0	.5	8	--	--
11...	--	8300	--	6	3	--	--	--	<50	37
JUL										
28...	40	--	6	--	--	0	.1	--	--	--
SEP										
01...	70	--	1	--	--	10	.1	20	--	--

ND MATERIAL SPECIFICALLY ANALYZED FOR BUT NOT DETECTED

15011870 WHITE CREEK NEAR KETCHIKAN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT										
24...	--	--	0	10	--	--	2.1	.2	0	.00
24...	ND	2	--	--	15	13	--	--	--	--
NOV										
15...	--	--	--	--	--	--	--	--	--	--
FEB										
20...	--	--	0	10	--	--	1.5	--	--	--
20...	ND	2	--	--	14	130	--	--	--	--
MAY										
11...	--	--	0	20	--	--	--	--	3	.35
11...	ND	3	--	--	25	33	--	--	--	--
JUL										
28...	--	--	0	20	--	--	1.3	--	--	--
SEP										
01...	--	--	0	0	--	--	2.2	.9	--	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), OCTOBER 1978 TO AUGUST 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	32	28	24	10	43	41	71	69			---	---
2	31	17	26	17	44	20	71	70			---	---
3	28	16	28	25	36	22	70	69			---	---
4	35	28	33	28	41	36	71	70			42	24
5	38	35	34	14	44	41	71	70			31	25
6	40	36	24	14	48	45	72	71			31	24
7	42	35	29	24	49	48	73	72			31	24
8	40	20	34	29	48	28	74	73			36	31
9	29	17	37	35	37	30	74	73			43	37
10	26	19	40	38	43	37	75	74			44	43
11	31	25	41	40	48	43	76	75			44	32
12	33	21	43	41	48	35	77	75			40	32
13	19	13	45	43	35	19	82	77			44	40
14	28	18	45	43	41	32	82	81			46	37
15	35	29	41	19	46	41	---	---			43	37
16	38	35	39	31	49	46	---	---			47	43
17	39	22	44	40	51	49	---	---			52	47
18	22	13	48	45	54	51	---	---			54	52
19	23	15	50	48	55	53	---	---			52	50
20	27	22	51	50	54	52	---	---			52	47
21	31	20	53	52	57	55	---	---			50	47
22	21	17	55	54	58	56	---	---			47	42
23	24	15	55	46	58	56	---	---			44	40
24	28	24	46	30	59	58	---	---			42	39
25	25	15	31	28	61	60	---	---			46	42
26	29	22	31	26	63	61	---	---			51	47
27	30	28	24	18	65	62	---	---			55	52
28	35	28	32	23	68	65	---	---			58	55
29	38	29	37	32	69	66	---	---			59	58
30	27	11	40	37	69	68	---	---			62	59
31	23	10	---	---	71	70	---	---			64	62
MONTH	42	10	55	10	71	19					64	24

ND MATERIAL SPECIFICALLY ANALYZED FOR BUT NOT DETECTED

15011870 WHITE CREEK NEAR KETCHIKAN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), OCTOBER 1978 TO AUGUST 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	66	63	33	28	20	13	27	24	28	24		
2	68	65	33	30	17	13	27	21	33	23		
3	69	67	30	28	20	15	25	21	38	23		
4	69	64	30	27	19	15	26	23	38	23		
5	64	41	32	28	16	13	24	21	35	24		
6	52	45	32	30	20	15	24	21	24	24		
7	54	50	32	29	23	20	24	23	35	24		
8	55	53	31	29	23	21	25	24	38	23		
9	57	55	34	31	22	17	24	22	27	23		
10	55	53	33	23	22	19	27	22	27	23		
11	54	49	30	21	24	20	24	22	27	23		
12	52	48	25	22	24	22	27	23	28	23		
13	52	48	26	20	25	22	30	27	28	24		
14	53	49	26	21	24	17	29	28	28	24		
15	53	48	27	20	19	17	30	26	25	24		
16	52	48	25	21	22	18	29	23	27	24		
17	52	45	21	18	21	18	26	24	38	24		
18	50	46	22	20	21	19	25	24	38	24		
19	49	41	24	21	22	19	28	24	28	24		
20	47	36	24	20	23	21	29	25	35	24		
21	44	36	24	20	24	23	31	21	35	24		
22	41	30	22	16	24	22	30	23	28	24		
23	37	31	18	12	24	22	32	26	27	25		
24	35	31	18	14	25	22	31	29	29	24		
25	35	30	18	11	24	20	33	30	29	24		
26	34	29	16	14	23	20	38	31	---	25		
27	33	27	21	17	23	20	38	23	---	---		
28	32	26	23	20	25	21	24	23	---	---		
29	32	27	23	21	25	18	25	23	---	---		
30	32	27	23	19	23	19	24	24	---	---		
31	---	---	20	17	---	---	27	24	---	---		
MONTH	69	26	34	11	25	13	38	21	38	23		
YEAR	82	10										

15011870 WHITE CREEK NEAR KETCHIKAN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.5	6.5	6.5	4.0	2.0	1.5			---	---	1.5	.5
2	7.0	6.5	4.5	3.5	2.0	.5			---	---	1.5	.0
3	7.5	6.5	4.0	3.0	2.0	1.0			---	---	.0	.0
4	7.0	6.0	4.0	3.5	2.0	1.0			---	---	.5	.0
5	7.0	6.5	4.0	2.0	2.0	1.0			---	---	1.0	.0
6	8.0	7.0	3.5	2.0	1.5	.5			---	---	1.0	.0
7	8.0	7.0	3.5	2.5	2.0	1.5			---	---	1.0	.0
8	8.0	7.0	3.5	3.0	2.0	.5			---	---	2.0	1.0
9	7.0	6.0	3.0	2.5	1.5	.0			---	---	2.0	1.5
10	6.0	5.5	3.0	2.0	1.5	1.0			---	---	2.0	1.5
11	6.5	5.5	3.0	2.5	1.0	.0			---	---	2.0	1.0
12	6.0	5.0	2.5	2.0	---	---			---	---	1.5	1.0
13	7.0	5.0	3.0	2.0	---	---			---	---	2.0	1.5
14	6.5	6.0	3.0	2.0	---	---			---	---	2.0	1.0
15	7.0	6.5	2.0	1.0	---	---			---	---	2.0	1.0
16	7.0	6.5	2.5	2.0	---	---			---	---	2.0	1.5
17	7.5	6.5	2.5	.5	---	---			---	---	2.0	1.5
18	9.0	7.5	1.0	.5	---	---			---	---	2.5	1.5
19	7.5	5.0	.5	.0	---	---			---	---	2.5	1.5
20	5.5	5.0	1.0	.0	---	---			1.5	.5	2.5	1.5
21	6.0	5.5	1.5	.0	---	---			1.0	.0	2.5	1.0
22	5.5	5.0	2.0	1.5	---	---			.5	.0	2.5	1.0
23	6.0	5.0	2.5	2.0	---	---			.0	.0	2.0	1.0
24	5.5	5.0	2.0	1.0	---	---			.0	.0	2.0	1.0
25	5.0	4.5	2.0	1.5	---	---			1.0	.0	2.0	1.0
26	5.5	4.5	2.0	1.5	---	---			1.5	1.0	2.0	.5
27	5.0	5.0	2.0	.5	---	---			1.0	.5	2.0	.5
28	5.0	4.5	2.5	2.0	---	---			1.5	1.0	2.0	.5
29	5.0	4.5	2.5	2.0	---	---			---	---	2.0	1.0
30	4.5	4.0	2.0	1.5	---	---			---	---	2.5	.0
31	5.0	4.5	---	---	---	---			---	---	2.5	.0
MONTH	9.0	4.0	6.5	.0		.0				.0	2.5	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	2.0	.5	2.0	1.0	2.5	2.0	---	3.5	---	---	9.5	9.0
2	2.0	.0	2.0	1.0	3.5	2.0	4.5	3.5	14.0	11.0	---	---
3	2.5	1.0	2.0	1.0	3.0	2.5	4.5	3.5	16.0	13.5	---	---
4	2.5	1.5	2.0	1.0	3.0	2.5	7.0	3.5	---	---	---	---
5	1.5	.5	2.5	1.0	3.0	2.5	---	3.5	---	---	---	---
6	2.0	1.0	2.0	1.5	3.5	2.5	6.0	3.5	---	---	---	---
7	1.5	.5	2.0	1.5	3.5	2.5	5.5	4.0	---	---	---	---
8	2.5	1.0	2.0	1.0	3.0	2.5	5.5	4.0	---	---	---	---
9	2.5	1.0	2.0	1.0	3.5	2.5	6.0	4.0	---	---	---	---
10	2.5	1.0	1.5	1.0	4.0	2.5	5.5	4.0	---	---	---	---
11	2.5	1.0	2.0	1.0	4.5	2.5	6.0	4.0	---	---	---	---
12	2.5	1.0	2.5	1.5	3.5	2.5	5.0	4.0	---	---	---	---
13	2.5	1.0	2.5	1.5	3.5	2.5	5.5	4.0	---	---	---	---
14	2.5	1.0	3.0	1.0	3.5	2.5	6.5	4.5	---	---	---	---
15	3.0	.5	2.5	1.5	4.0	3.0	8.0	4.0	---	---	---	---
16	2.5	.5	2.5	1.5	4.5	2.5	7.5	4.5	---	---	---	---
17	3.0	.5	2.5	1.5	4.5	3.0	7.5	5.0	---	---	---	---
18	2.5	.5	2.5	1.5	4.0	3.0	9.0	5.5	---	---	---	---
19	2.5	.5	2.5	1.5	4.0	3.0	7.5	5.0	---	---	---	---
20	3.0	.5	2.5	1.5	4.0	3.0	7.5	5.5	---	---	---	---
21	2.5	.5	3.0	1.5	4.0	3.0	7.5	5.5	---	---	---	---
22	2.0	.5	2.5	1.5	4.0	3.0	7.0	5.5	---	---	---	---
23	2.0	.5	2.0	1.5	---	3.0	8.0	5.5	---	---	---	---
24	2.0	.5	2.5	2.0	---	3.0	9.5	5.0	---	---	---	---
25	2.0	.5	2.0	2.0	5.5	3.0	10.0	5.5	---	---	---	---
26	2.0	.5	2.5	2.0	5.5	3.0	9.5	5.5	11.5	8.0	---	---
27	2.0	.5	2.5	2.0	5.5	3.0	15.5	6.0	11.0	7.5	---	---
28	2.0	.5	3.0	2.0	4.5	3.0	---	---	9.5	8.0	---	---
29	2.0	.5	2.5	2.0	4.5	3.5	---	---	10.5	7.5	---	---
30	2.0	1.0	3.0	2.0	4.5	3.0	---	---	10.0	8.0	---	---
31	---	---	3.0	2.0	---	---	16.0	8.0	10.0	8.5	---	---
MONTH	3.0	.0	3.0	1.0	5.5	2.0		3.5				
YEAR	16.0	.0										

15011880 KETA RIVER NEAR KETCHIKAN

LOCATION.--Lat 55°21'13", long 130°26'56", in SW¼NE¼ sec.24, T.75 S., R.98 E., Hydrologic Unit 19060000, in Tongass National Forest, on left bank 1.6 mi (2.6 km) upstream from mouth at head of Boca de Quadra and 45 mi (72 km) east of Ketchikan.

DRAINAGE AREA.--74.2 mi^2 (193 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 40 ft (12 m), from topographic map.

REMARKS.--Water-discharge records poor. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,300 ft^3/s (858 m^3/s) Oct. 31, 1978, gage height, 8.80 ft (2.682 m) from rating curve extended above 3,200 ft^3/s (91 m^3/s) on basis of slope-conveyance study at gage height 6.23 ft (1.899 m); minimum daily, 46 ft^3/s (1.30 m^3/s) Feb. 28, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 30,300 ft^3/s (858 m^3/s) Oct. 31, gage height, 8.80 ft (2.682 m), from rating curve extended as explained above; minimum daily, 46 ft^3/s (1.30 m^3/s) Feb. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1240	6880	600	160	110	56	150	1000	865	970	1200	449
2	2080	1380	900	150	105	500	145	1250	909	973	1000	900
3	4940	1100	1050	145	150	800	150	1400	429	971	820	306
4	1020	750	670	140	220	1600	175	1500	940	950	700	526
5	603	660	540	135	250	1400	250	1150	1000	980	660	502
6	627	1400	430	135	120	2000	265	900	980	960	630	601
7	520	1100	400	135	160	2800	245	720	1070	940	600	462
8	1490	740	1100	135	170	1000	225	1100	990	920	590	483
9	1860	580	570	130	130	400	200	992	1080	940	580	765
10	2620	520	450	130	110	360	200	874	700	980	560	1270
11	1620	440	390	125	105	350	210	858	1000	960	550	609
12	938	400	430	125	95	400	220	867	950	900	540	1290
13	8560	350	620	120	89	430	230	880	908	840	540	1270
14	2510	340	500	120	80	340	170	1080	896	820	620	1130
15	1080	700	410	130	78	350	145	960	960	820	580	691
16	663	520	340	135	70	330	140	891	950	850	550	1020
17	971	400	290	140	67	290	145	883	940	950	550	2080
18	5750	320	265	145	62	260	160	842	956	1000	510	1320
19	4480	270	260	140	58	230	210	881	961	1000	470	683
20	1290	250	250	130	57	246	225	900	963	930	430	496
21	799	230	240	130	54	260	240	914	947	1150	380	401
22	1740	210	230	140	53	270	260	870	951	1130	330	346
23	3190	220	220	155	52	300	300	879	906	1200	310	153
24	2500	350	210	170	51	320	450	845	920	900	280	600
25	1500	550	200	180	49	340	600	862	950	720	260	1180
26	800	880	195	150	48	300	720	880	1000	650	240	1120
27	620	1200	190	140	47	260	840	860	1100	600	228	1590
28	540	1650	185	130	46	230	950	846	1800	750	222	1670
29	420	900	180	120	---	200	1100	843	1010	1000	218	1040
30	3100	520	170	120	---	170	750	865	970	1450	208	2510
31	8760	---	165	115	---	160	---	898	---	1300	212	---
TOTAL	68831	25810	12650	4255	2686	16946	10070	29490	29001	29504	15568	27363
MEAN	2220	860	408	137	95.9	547	336	951	967	952	502	912
MAX	8760	6880	1100	180	250	2800	1100	1500	1800	1450	1200	2510
MIN	420	210	165	115	46	56	140	720	429	600	208	153
CFSM	29.9	11.6	5.50	1.85	1.29	7.38	4.53	12.8	13.0	12.8	6.77	12.3
IN.	34.53	12.95	6.35	2.13	1.35	8.50	5.05	14.79	14.55	14.80	7.81	13.73
AC-FT	136500	51190	25090	8440	5330	33610	19970	58490	57520	58520	30880	54270

CAL YR 1978 TOTAL 266224 MEAN 729 MAX 8760 MIN 76 CFSM 9.83 IN 133.56 AC-FT 528100
WTR YR 1979 TOTAL 272174 MEAN 746 MAX 8760 MIN 46 CFSM 10.1 IN 136.54 AC-FT 539900

15011880 KETA RIVER NEAR KETCHIKAN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 and 1979.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May to October 1978 and March to September 1979.
WATER TEMPERATURES: May to October 1978 and March to September 1979.

INSTRUMENTATION.--Mini-water-quality monitor in conjunction with satellite telemeter since May 26, 1978.

REMARKS.--Records fair. Gage was destroyed on Oct. 3 and re-installed on Mar. 10. Sporadic record throughout remainder of year due to equipment malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 41 micromhos/cm May 21, 1979; minimum recorded, 9 micromhos/cm Aug. 7, 1978.
WATER TEMPERATURES: Maximum, 14.5°C July 31, Aug. 2, 1978; minimum, 0.0°C Mar. 16, 1979.

EXTREMES FOR CURRENT PERIOD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 41 micromhos/cm May 21; minimum recorded, 11 micromhos/cm Aug. 1.
WATER TEMPERATURES: Maximum, 14.0°C Aug. 26, 27; minimum, 0.0°C Mar. 16.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)
OCT											
23...	1430	1/1028	2/80020	3160	13	--	6.0	--	--	5	2
23...	1431	--	3/9815	3160	--	--	--	--	ND	--	--
FEB											
20...	1230	1028	80020	55	37	7.3	.0	--	--	11	2
20...	1231	--	9815	55	--	--	--	--	<25	--	--
MAY											
09...	1500	--	80020	898	16	7.1	3.5	12.3	--	6	3
09...	1501	--	9815	898	--	--	--	--	<25	--	--
JUL											
29...	1230	--	80020	660	16	7.2	8.5	12.0	--	5	0
SEP											
01...	1045	--	80020	349	22	7.1	9.5	--	--	8	1

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)
OCT											
23...	1.7	.1	.4	.1	--	4.0	.7	.0	2.9	12	12
23...	--	--	--	--	--	--	--	--	--	--	--
FEB											
20...	4.1	.3	1.2	.3	--	7.3	1.0	.0	4.3	19	24
20...	--	--	--	--	--	--	--	--	--	--	--
MAY											
09...	2.3	.0	1.0	.3	--	3.9	.8	.1	2.0	14	12
09...	--	--	--	--	--	--	--	--	--	--	--
JUL											
29...	2.0	.1	.3	.4	11	2.5	.4	.0	1.8	5	13
SEP											
01...	2.7	.3	1.0	.3	--	4.1	.3	.0	2.1	16	15

1/ U.S. GEOLOGICAL SURVEY
2/ U.S. GEOLOGICAL SURVEY
3/ ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ND MATERIAL SPECIFICALLY ANALYZED FOR BUT NOT DETECTED

15011880 KETA RIVER NEAR KETCHIKAN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)
OCT											
23...	.03	.00	.03	.01	.17	.18	.21	.000	.01	0	--
23...	--	--	--	--	--	--	--	--	--	--	ND
FEB											
20...	.11	.00	.11	.06	.04	.10	.21	.030	.01	3	--
20...	--	--	--	--	--	--	--	--	--	--	ND
MAY											
09...	.06	.00	.06	.00	.06	.06	.12	.000	.01	0	--
09...	--	--	--	--	--	--	--	--	--	--	<5
JUL											
29...	.01	.02	.03	.01	.29	.30	.33	.020	.01	1	--
SEP											
01...	.04	.00	.04	.01	.12	.13	.17	.010	.00	0	--

DATE	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)
OCT										
23...	--	1	--	--	0	--	--	7	--	--
23...	--	--	ND	--	--	ND	--	--	<5	--
FEB										
20...	--	0	--	--	0	--	--	1	--	--
20...	5	--	ND	0	--	ND	6	--	<5	5
MAY										
09...	--	1	--	--	0	--	--	2	--	--
09...	7	--	ND	0	--	<5	7	--	ND	4
JUL										
29...	--	0	--	--	0	--	--	1	--	--
SEP										
01...	--	0	--	--	120	--	--	1	--	--

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	MOLYB- DENUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)
OCT										
23...	360	--	14	--	--	20	.0	4	--	--
23...	--	--	--	<5	--	--	--	--	ND	--
FEB										
20...	100	--	24	--	--	20	.1	1	--	--
20...	--	520	--	ND	1	--	--	--	ND	4
MAY										
09...	140	--	14	--	--	10	.3	0	--	--
09...	--	6600	--	<5	3	--	--	--	ND	3
JUL										
29...	80	--	8	--	--	0	.1	--	--	--
SEP										
01...	90	--	0	--	--	0	.1	0	--	--

ND MATERIAL SPECIFICALLY ANALYZED FOR BUT NOT DETECTED

15011880 KETA RIVER NEAR KETCHIKAN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT										
23...	--	--	0	30	--	--	4.3	.2	27	230
23...	<10	--	--	--	<10	--	--	--	--	--
FEB										
20...	--	--	0	0	--	--	1.1	--	--	--
20...	ND	4	--	--	66	160	--	--	--	--
MAY										
09...	--	--	0	10	--	--	--	--	--	--
09...	ND	4	--	--	33	12	--	--	--	--
JUL										
29...	--	--	0	10	--	--	--	--	--	--
SEP										
01...	--	--	0	0	--	--	1.4	.0	--	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), OCTOBER 1978 AND MARCH TO SEPTEMBER 1979

DAY	MAX	MIN	DAY	MAX	MIN	DAY	MAX	MIN	DAY	MAX	MIN
	OCTOBER			MARCH			MARCH			MARCH	
1	20	19	10	23	23	13	21	21	16	20	12
2	19	16	12	21	21	15	17	17			

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	22	20	23	20	13	11	22	20
2			---	---	21	20	23	19	16	12	21	20
3			---	---	21	20	22	19	19	15	20	18
4			---	---	21	19	24	22	19	17	21	19
5			---	---	20	19	24	21	18	17	22	21
6			---	---	21	19	24	21	18	16	24	21
7			---	---	23	21	23	20	18	16	22	22
8			---	---	23	21	23	21	20	17	24	22
9			---	---	23	21	22	20	21	17	23	22
10			32	31	22	21	21	19	21	17	23	19
11			32	30	23	21	21	19	21	17	22	19
12			35	30	23	20	22	20	21	18	23	20
13			36	34	24	21	23	21	19	17	21	18
14			39	36	24	21	25	21	17	16	21	18
15			39	37	22	20	25	21	17	15	23	20
16			38	36	22	20	25	21	17	16	23	20
17			38	36	22	20	22	19	17	16	21	17
18			36	35	21	---	21	17	17	17	20	18
19			38	36	20	20	21	18	18	17	22	20
20			38	37	22	20	19	17	18	17	24	22
21			41	38	23	21	18	15	18	16	25	24
22			40	38	23	22	---	---	17	17	26	25
23			38	19	22	21	---	---	17	16	27	26
24			25	20	22	22	---	---	18	17	27	26
25			25	19	23	21	---	---	18	17	27	21
26			20	19	22	20	---	---	18	17	22	20
27			22	19	21	19	---	---	17	17	22	20
28			24	21	21	19	---	---	18	17	20	18
29			24	23	21	18	---	---	19	18	22	19
30			24	23	20	18	16	12	19	19	23	21
31			24	21	---	---	14	13	---	---	---	---
MONTH					24	18			21	11	27	17

ND MATERIAL SPECIFICALLY ANALYZED FOR BUT NOT DETECTED

15011880 KETA RIVER NEAR KETCHIKAN--Continued

TEMPERATURE, WATER (DEG. C), OCTOBER 1978 AND MARCH TO SEPTEMBER 1979

DAY	MAX	MIN	DAY	MAX	MIN	DAY	MAX	MIN	DAY	MAX	MIN
	OCTOBER			MARCH			MARCH			MARCH	
1	10.0	9.0	10	1.0	1.0	13	1.0	1.0	16	1.0	1.0
2	9.5	9.0	12	1.0	1.0	15	1.0	1.0			

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	3.5	2.5	6.0	4.5	8.5	7.0	11.0	9.0
2			---	---	5.0	3.0	6.0	5.0	9.5	7.0	11.0	---
3			---	---	4.0	2.5	5.5	4.5	11.5	7.5	11.0	---
4			---	---	4.0	1.5	9.0	4.5	11.5	8.5	---	---
5			---	---	4.0	2.5	9.0	5.0	10.0	8.5	10.5	---
6			---	---	4.5	1.5	8.5	5.5	9.5	7.0	10.0	8.5
7			---	---	5.0	3.0	7.5	5.5	10.5	8.0	10.0	8.5
8			---	---	4.5	3.0	7.5	5.5	12.0	7.5	10.5	9.5
9			---	---	5.0	3.5	8.0	5.5	12.0	7.0	10.0	9.0
10			3.0	2.0	6.0	3.5	7.0	5.5	12.0	8.5	10.0	9.0
11			3.0	1.5	7.5	2.0	8.5	4.5	12.5	8.5	10.5	8.5
12			4.5	1.0	5.5	3.5	7.0	6.0	12.5	8.5	10.0	8.5
13			4.0	2.0	5.0	3.5	8.0	4.5	13.0	9.0	10.0	9.5
14			5.5	1.5	4.5	3.5	8.5	5.0	13.0	9.5	10.0	9.0
15			5.0	2.5	5.5	3.5	10.0	5.0	11.5	9.0	11.0	9.0
16			4.0	1.5	8.0	3.5	10.0	5.0	12.5	9.5	10.0	---
17			4.5	2.5	7.0	4.0	9.5	7.0	12.5	10.0	---	---
18			4.0	2.0	6.0	4.0	10.5	7.0	11.0	10.0	---	---
19			5.0	2.5	5.5	4.0	9.5	7.0	13.0	9.0	10.0	---
20			5.0	2.5	5.5	4.0	8.5	7.0	13.5	9.0	9.0	---
21			5.5	1.5	5.5	4.0	7.5	6.0	13.5	9.5	---	---
22			4.0	2.5	6.0	4.5	---	---	13.5	10.0	---	---
23			3.5	2.5	5.0	4.0	---	---	11.5	10.0	9.0	---
24			3.0	1.5	5.5	4.0	---	---	13.5	10.0	---	---
25			3.0	2.5	8.5	4.5	---	---	14.0	10.5	---	---
26			3.5	1.5	8.5	3.5	---	---	14.0	10.5	9.5	---
27			3.5	1.5	8.5	4.5	---	---	13.0	10.5	---	---
28			4.0	2.5	7.5	4.5	---	---	11.5	10.5	---	---
29			4.5	2.0	6.0	5.0	---	---	13.0	10.0	---	---
30			5.0	2.5	6.0	4.0	9.5	7.5	11.5	10.5	---	---
31			4.5	3.0	---	---	9.0	7.0	---	---	---	---
MONTH			5.5		8.5	1.5		4.5	14.0	7.0	11.0	

15022000 HARDING RIVER NEAR WRANGELL

LOCATION.--Lat 56°12'48", long 131°38'12", in SW¼SW¼ sec.22, T.65 S., R.89 E., Hydrologic Unit 19060000, in Tongass National Forest, on right bank 1 mi (1.6 km) upstream from mouth on north shore of Bradfield Canal, 4 mi (6 km) downstream from Fall Lake, and 34 mi (55 km) southeast of Wrangell.

DRAINAGE AREA.--67.4 mi² (174.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1951 to current year.

REVISED RECORDS.--WSP 1640: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 20 ft (6 m), by barometer. Prior to Sept. 30, 1960, at site 300 ft (90 m) upstream at datum 0.12 ft (0.037 m) lower. Oct. 1, 1960, to Aug. 23, 1975, at prior site and present datum.

REMARKS.--Records good except those for Dec. 27 through Mar. 18, which are poor.

AVERAGE DISCHARGE.--28 years, 732 ft³/s (20.73 m³/s), 147.49 in/yr (3,746 mm/yr), 530,300 acre-ft/yr (654 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,000 ft³/s (425 m³/s) Oct. 14, 1961, gage height, 16.22 ft (4.944 m) site then in use, from rating curve extended above 5,000 ft³/s (140 m³/s) on basis of slope-area measurement at gage height, 13.90 ft (4.237 m); minimum daily, 35 ft³/s (0.99 m³/s) Jan. 23 to Feb. 5, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft³/s (113 m³/s) and maximum (*).

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 3	0630	4,110	116	9.65	2.941	Oct. 31	0900	6,110	173	11.23	3.423
Oct. 13	1915	6,720	190	11.67	3.557	Sept.13	1345	4,060	115	9.61	2.929
Oct. 18	2300	*6,890	195	*11.79	3.594						

Minimum daily discharge, 58 ft³/s (1.43 m³/s) Feb. 15, 17-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	938	3140	326	96	93	87	162	1170	1550	1110	1650	1030
2	1640	2820	315	93	85	120	143	1070	1930	1090	1650	1030
3	2990	1190	581	90	81	190	136	1200	1810	1230	1100	872
4	1290	764	367	88	77	320	136	1270	1670	1190	905	794
5	951	652	282	83	73	400	214	1130	1780	1260	886	661
6	1610	1390	239	80	70	370	289	1040	1460	1360	864	632
7	1250	844	225	76	68	350	248	921	1170	1380	853	537
8	1670	579	220	73	67	390	244	934	981	1270	739	542
9	1570	430	310	72	65	370	222	810	1040	1440	652	572
10	1660	345	307	71	63	350	218	679	1170	1580	668	725
11	1900	316	230	70	62	340	222	880	1000	1470	693	616
12	1110	277	207	69	61	330	244	781	1010	1310	720	1340
13	3660	248	339	70	60	315	271	671	924	1160	744	2570
14	2110	236	307	71	59	305	266	647	1030	1080	826	1870
15	1960	269	250	73	58	295	262	576	1300	1060	852	1380
16	1020	228	206	76	59	290	266	556	1200	1120	770	1530
17	1810	317	237	80	58	285	266	747	1200	1380	722	1910
18	4860	582	458	87	58	287	271	886	1210	1700	723	1160
19	3090	742	125	97	58	289	294	821	1310	1710	710	794
20	1300	688	110	102	59	308	308	749	1190	2170	743	606
21	898	530	102	108	60	342	352	706	1140	2270	746	496
22	1150	442	100	115	61	303	414	882	1030	2660	717	518
23	1710	418	98	119	62	303	566	1890	1280	1380	773	541
24	922	521	173	122	63	308	657	1980	1380	1260	780	969
25	1240	635	143	125	65	303	759	1840	1210	1220	784	1570
26	963	554	134	121	67	280	778	1800	1300	1210	762	1250
27	760	1180	125	119	72	244	900	1290	1380	1190	734	1970
28	579	1150	110	117	79	218	1180	948	1370	1060	683	1820
29	450	609	102	112	---	197	1280	824	1850	900	594	1060
30	1740	426	100	105	---	177	1250	881	1630	1010	542	1100
31	4210	---	98	98	---	165	---	964	---	1260	898	---
TOTAL	53011	22522	6926	2878	1863	8831	12818	31543	39505	42490	25483	32455
MEAN	1710	751	223	92.8	66.5	285	427	1018	1317	1371	822	1082
MAX	4860	3140	581	125	93	400	1280	1980	1930	2660	1650	2570
MIN	450	228	98	69	58	87	136	556	924	900	542	496
CFSM	25.4	11.1	3.31	1.38	.99	4.23	6.34	15.1	19.5	20.3	12.2	16.1
IN.	29.26	12.43	3.82	1.59	1.03	4.87	7.07	17.41	21.80	23.45	14.06	17.91
AC-FT	105100	44670	13740	5710	3700	17520	25420	62570	78360	84280	50550	64370

CAL YR 1978 TOTAL 244346 MEAN 669 MAX 4860 MIN 66 CFSM 9.93 IN 134.69 AC-FT 484100
WTR YR 1979 TOTAL 280325 MEAN 768 MAX 4860 MIN 58 CFSM 11.4 IN 154.72 AC-FT 556000

15022000 HARDING RIVER NEAR WRANGELL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-72 and 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
FEB 06...	1605	70	46	7.4	1.0
MAY 07...	1100	--	23	6.5	5.5

15024750 GOAT CREEK NEAR WRANGELL

LOCATION.--Lat 56°39'40", long 131°58'14", in NE¼NE¼ sec.23, T.60 S., R.85 E., Hydrologic Unit 19060000, in Tongass National Forest, on left bank 0.4 mi (0.6 km) upstream from mouth and 20 mi (32.2 km) northeast of Wrangell.

DRAINAGE AREA.--17.3 mi² (44.8 km²).

PERIOD OF RECORD.--August 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 35 ft (11 m), from topographic map.

REMARKS.--Records good except those for Dec. 17 to Mar. 10, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,370 ft³/s (67.1 m³/s) Oct. 18, 1978, gage height, 4.55 ft (1.387 m), from rating curve extended above 720 ft³/s (20 m³/s); minimum daily, 10 ft³/s (0.28 m³/s) Feb. 26-27, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,370 ft³/s (67.1 m³/s) Oct. 18 (1815 hrs), gage height, 4.55 ft (1.387 m), from rating curve extended above 720 ft³/s (20 m³/s); minimum daily, 10 ft³/s (0.28 m³/s) Feb. 26-27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	614	1060	87	48	20	11	27	317	362	335	488	199
2	747	582	100	46	19	12	26	316	315	327	423	195
3	426	349	136	42	18	13	25	368	314	342	299	174
4	356	209	99	37	19	42	24	391	339	320	237	149
5	483	163	77	30	22	70	31	345	317	330	225	126
6	336	268	63	23	25	130	39	316	346	351	224	115
7	485	203	59	20	28	400	37	293	300	366	215	103
8	488	145	68	18	31	520	38	301	280	345	190	103
9	488	103	90	17	33	250	35	247	300	362	172	107
10	412	82	75	16	35	90	35	226	390	405	149	112
11	291	81	58	15	39	72	29	241	360	400	148	106
12	1040	70	57	14	41	72	38	227	331	361	150	265
13	698	59	82	14	42	58	41	225	320	319	152	617
14	615	58	74	13	44	49	40	222	336	294	162	471
15	349	72	64	13	45	49	40	217	375	286	172	319
16	584	62	60	12	40	46	39	276	366	279	169	328
17	1120	70	58	12	35	42	41	525	365	319	163	376
18	1830	142	56	15	31	41	45	567	369	421	160	262
19	712	241	58	19	28	41	50	568	393	505	156	184
20	276	249	60	20	26	45	55	514	374	720	153	136
21	408	224	62	25	23	49	63	397	344	1210	151	112
22	528	212	61	32	19	46	75	310	328	1080	150	135
23	332	189	58	39	14	45	99	280	357	479	156	161
24	371	55	55	47	12	47	119	288	373	348	154	186
25	292	77	50	56	11	45	146	299	360	310	150	320
26	226	103	42	66	10	42	163	430	386	299	143	248
27	171	255	42	42	10	39	208	556	405	291	140	348
28	136	290	43	33	11	36	273	533	394	272	136	349
29	540	173	46	26	---	33	302	465	489	245	125	260
30	1210	117	48	25	---	31	323	489	453	248	114	270
31	891	---	49	22	---	30	---	440	---	310	160	---
TOTAL	17455	5963	2037	857	731	2496	2506	11189	10741	12479	5786	6816
MEAN	563	199	65.7	27.6	26.1	80.5	83.5	361	358	403	187	227
MAX	1830	1060	136	66	45	520	323	568	489	1210	488	617
MIN	136	55	42	12	10	11	24	217	280	245	114	103
CFSM	32.5	11.5	3.80	1.60	1.51	4.65	4.83	20.9	20.7	23.3	10.8	13.1
IN.	37.53	12.82	4.38	1.84	1.57	5.37	5.39	24.06	23.09	26.83	12.44	14.66
AC-FT	34620	11830	4040	1700	1450	4950	4970	22190	21300	24750	11480	13520

CAL YR 1978 TOTAL 66588 MEAN 182 MAX 1830 MIN 14 CFSM 10.5 IN 143.18 AC-FT 132100
WTR YR 1979 TOTAL 79056 MEAN 217 MAX 1830 MIN 10 CFSM 12.5 IN 169.98 AC-FT 156800

15024800 STIKINE RIVER NEAR WRANGELL
(National stream-quality accounting network station)

LOCATION.--Lat 56°42'07", long 132°08'28", in SE¼NW¼ sec.2, T.60 S., R.84 E., Hydrologic Unit 19060000, on right bank about 10 mi (16 km) upstream from mouth near Point Rothsay, 11 mi (18 km) west of Alaska-British Columbia boundary, and 18 mi (29 km) northeast of Wrangell.

DRAINAGE AREA.--19,920 mi^2 (51,000 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1976 to current year.

REVISED RECORDS.--WDR AK-78-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 25 ft (7.6 m), from topographic map.

REMARKS.--Water-discharge records fair except those for Nov. 21 to Apr. 30, which are poor. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 223,900 ft^3/s (6,340 m^3/s) July 22, 1979, gage height, 25.46 ft (7.760 m); minimum daily, 4,500 ft^3/s (127 m^3/s) Mar. 20 and 21, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 223,900 ft^3/s (6,340 m^3/s), July 22, gage height, 25.46 ft (7.760 m); minimum daily, 5,600 ft^3/s (159 m^3/s) Mar. 2 and 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42400	94100	22000	9200	7400	5700	6000	48500	114000	139000	142000	76000
2	68000	103000	20500	9100	7700	5600	6000	53600	137000	124000	165000	77500
3	102000	74600	22000	8900	8000	5600	6000	60300	159000	147000	180000	86800
4	105000	56600	21000	8700	8200	5700	6200	65200	166000	163000	150000	84200
5	80000	47200	18500	8500	8400	5700	7000	64300	165000	166000	122000	75400
6	92000	50800	18000	8400	8500	5800	9000	62500	152000	170000	110000	65300
7	100000	44900	17500	8200	8600	5800	12000	57000	142000	167000	107000	57400
8	94000	37500	17000	8000	8700	5900	12500	55600	130000	158000	102000	57100
9	103000	31300	17000	7900	8800	6100	11500	54700	112000	152000	94900	60300
10	109000	27200	16500	7700	8700	6300	10000	50500	105000	154000	92300	59000
11	111000	27200	16000	7500	8600	6500	10400	49100	102000	166000	94200	57100
12	90000	31400	16000	7400	8600	6600	10800	46900	102000	173000	98700	59900
13	110000	40600	16000	7300	8400	6800	11200	44300	103000	162000	97100	94200
14	130000	55000	16000	7200	8400	7000	12000	41500	104000	153000	110000	131000
15	100000	192000	15500	7100	8200	7000	11800	39200	107000	144000	138000	139000
16	90000	180000	15200	7100	8100	7200	11700	38600	105000	141000	110000	121000
17	98000	89000	15100	7100	8000	7400	12000	40600	107000	141000	102000	109000
18	140000	61000	15000	7000	7900	7600	12400	44700	111000	165000	98800	92500
19	120000	56000	14500	6900	7700	7500	13300	44700	116000	184000	95000	75200
20	80000	41700	14000	6800	7500	7400	14500	43100	122000	199000	98900	63600
21	60000	40000	13500	6700	7400	7400	16000	42500	126000	213000	104000	54600
22	60000	36000	13000	6600	7200	7400	17500	43500	135000	213000	100000	51600
23	73000	32000	12500	6600	7000	7400	19000	56300	147000	179000	101000	52500
24	70000	32000	12000	6600	6800	7300	22000	72200	142000	155000	109000	55800
25	58000	34000	11000	6600	6600	7200	24000	84500	134000	149000	107000	64000
26	50000	37000	10700	6600	6400	7100	27000	97800	143000	146000	105000	71800
27	45000	36000	10500	6600	6100	7000	31000	96400	154000	146000	104000	70500
28	38000	93400	10200	6700	5800	6600	36000	94100	158000	146000	100000	72600
29	35000	35000	9800	6900	---	6300	40000	94700	159000	139000	98700	56800
30	54000	32000	9500	7100	---	6200	44800	98600	159000	135000	88200	50600
31	120000	---	9300	7200	---	6100	---	104000	---	135000	74600	---
TOTAL	2627400	1748500	465300	230200	217700	205200	483600	1889500	3918000	4924000	3383400	2242400
MEAN	84750	58280	15010	7426	7775	6619	16120	60950	130600	158800	109100	74750
MAX	140000	192000	22000	9200	8800	7600	44800	104000	166000	213000	180000	139000
MIN	35000	27200	9300	6600	5800	5600	6000	38600	102000	124000	74600	50600
CFSM	4.26	2.93	.75	.37	.39	.33	.81	3.06	6.56	7.97	5.48	3.75
IN.	4.91	3.27	.87	.43	.41	.38	.90	3.53	7.32	9.20	6.32	4.19
AC-FT	5211000	3468000	922900	456600	431800	407000	959200	3748000	7771000	9767000	6711000	4448000

CAL YR 1978 TOTAL 18263300 MEAN 50040 MAX 192000 MIN 4500 CFSM 2.51 IN 34.11 AC-FT 36230000
WTR YR 1979 TOTAL 22335200 MEAN 61190 MAX 213000 MIN 5600 CFSM 3.07 IN 41.71 AC-FT 44300000

15024800 STIKINE RIVER NEAR WRANGELL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: July 1976 to current year.

INSTRUMENTATION.--Temperature recorder since July 27, 1976.

REMARKS.--Records are good and represent water temperature at sensor within 0.5°C. Temperature at sensor was compared with the average for the river by temperature cross sections on Nov. 11, Mar. 18, July 13, and Aug. 8. A maximum variation of 1.0°C was found within the cross sections. No record Jan. 23 to Mar. 15.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 11.0°C June 3, 12, and July 10, 1978; minimum, 0.0°C on many days during winter period.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 9.5°C June 22 and 26-27; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
NOV 01...	1500	96700	119	7.5	2.5	25	12.7	--	--	54	27
JAN 22...	1500	6640	200	7.3	.5	3.2	--	--	--	100	9
MAR 19...	1100	7400	240	--	.5	2.1	11.8	K2	<1	89	16
JUN 13...	1340	106000	195	8.0	8.5	50	11.4	K4	<1	58	54
JUL 13...	1200	164000	100	8.5	8.5	32	10.6	39	K280	44	0
AUG 08...	1410	102000	93	8.5	9.0	74	11.2	K10	K50	39	0
SEP 08...	1200	56600	106	7.8	8.0	40	11.6	K120	42	46	8

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
NOV 01...	18	2.2	1.7	.9	--	12	8.8	.1	4.5	93	65
JAN 22...	32	5.1	5.2	1.5	111	25	3.3	.1	7.6	132	135
MAR 19...	28	4.6	4.5	1.2	--	24	5.1	.1	6.5	107	118
JUN 13...	17	3.7	2.0	.9	5	11	34	.1	10	130	84
JUL 13...	14	2.1	1.2	.9	53	3.7	1.2	.1	3.8	61	54
AUG 08...	13	1.6	1.1	6.5	51	11	.5	.1	.6	52	60
SEP 08...	15	2.1	1.6	.7	47	11	.4	.1	3.0	60	57

K NON-IDEAL COLONY COUNT

15024800 STIKINE RIVER NEAR WRANGELL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
NOV 01...	.11	--	.01	.37	.38	.00	.42	.49	--	.230	.000
JAN 22...	1.3	--	.02	6.6	6.6	6.0	.60	7.9	--	.290	.300
MAR 19...	.31	--	.02	.08	.10	.01	.09	.41	--	.000	.000
JUN 13...	.05	--	.04	.28	.32	--	--	.37	--	.070	.000
JUL 13...	.03	--	.01	.07	.08	.00	.13	.11	--	.010	.050
AUG 08...	.01	--	.00	.11	.11	.00	.11	.12	--	.070	.000
SEP 08...	.03	.02	.02	.48	.50	.21	.29	.53	.31	.070	.010

DATE	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)
NOV 01...	2	--	0	100	60	40	2	1	<1	10	0
JAN 22...	0	--	0	100	0	100	6	5	1	10	0
MAR 19...	1	--	0	0	0	0	0	0	1	0	0
JUN 13...	1	--	1	100	40	60	--	--	<1	20	10
JUL 13...	2	--	0	100	70	30	0	0	3	20	20
AUG 08...	2	--	1	200	200	30	0	0	<1	10	0
SEP 08...	1	0	1	0	0	40	0	0	<1	20	10

DATE	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
NOV 01...	20	5	2	<3	37	23	14	9400	9100	280	43
JAN 22...	10	2	0	2	5	3	2	590	570	20	69
MAR 19...	0	0	0	0	18	0	18	420	370	50	15
JUN 13...	10	3	0	4	14	5	9	6300	3900	2400	--
JUL 13...	0	4	1	3	22	21	1	250	0	250	21
AUG 08...	10	4	1	<3	16	14	2	7800	7800	20	10
SEP 08...	10	3	0	<3	21	19	2	5800	--	20	15

15024800 STIKINE RIVER NEAR WRANGELL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)
NOV 01...	35	8	200	170	30	.6	.0	.7	1	0	1
JAN 22...	60	9	40	10	30	1.0	.0	1.4	0	0	1
MAR 19...	10	5	40	10	30	.2	.2	.0	0	0	0
JUN 13...	--	4	160	80	80	5.9	3.7	2.2	0	0	0
JUL 13...	21	0	280	270	10	35	15	20	0	0	0
AUG 08...	10	0	210	210	5	.2	.2	.0	0	0	0
SEP 08...	15	0	140	130	9	.9	.8	.1	0	0	0

DATE	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
NOV 01...	0	0	0	80	60	20	--	--	207	54000
JAN 22...	1	1	0	40	10	30	2.1	.9	13	233
MAR 19...	0	0	0	40	30	10	1.4	.5	12	262
JUN 13...	0	0	0	40	20	20	2.5	--	212	59500
JUL 13...	0	0	0	50	0	80	1.9	1.1	393	174000
AUG 08...	0	0	0	40	40	<3	14	2.6	175	48200
SEP 08...	0	0	0	10	7	<3	.4	.4	200	30600

DATE	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
NOV 01...	--	--	--	--	--	36	--	--	--	--
JAN 22...	--	--	--	--	--	60	--	--	--	--
MAR 19...	--	--	--	--	--	71	--	--	--	--
JUN 13...	20	26	34	42	51	60	67	91	99	100
JUL 13...	--	28	37	45	55	63	72	86	99	100
AUG 08...	31	41	52	63	73	81	89	98	100	--
SEP 08...	--	--	--	--	--	58	--	--	--	--

15024800 STIKINE RIVER NEAR WRANGELL--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO SEPTEMBER 1979

DATE	NOV 1,78	MAR 19,79	JUN 13,79	JUL 13,79	AUG 8,79	SEP 8,79
TIME	1500	1200	1340	1200	1410	1200
TOTAL CELLS/ML	570	10	0	13	0	820
DIVERSITY: DIVISION	0.4	0.0	0.0	0.0	0.0	0.0
.CLASS	0.4	0.0	0.0	0.0	0.0	0.0
..ORDER	1.1	0.0	0.0	0.0	0.0	0.0
...FAMILY	1.2	0.0	0.0	0.0	0.0	0.0
....GENUS	1.2	1.0	0.0	0.0	0.0	0.0

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..PENNALES												
...DIATOMACEAE												
....DIATOMA	14	2	--	-	--	-	--	-	--	-	--	-
...FRAGILARIACEAE												
....FRAGILARIA	--	-	5#	50	--	-	13#	100	--	-	--	-
....SYNEDRA	--	-	5#	50	--	-	--	-	--	-	--	-
...GOMPHONEMATACEAE												
....GOMPHONEMA	14	2	--	-	--	-	--	-	--	-	--	-
...NAVICULACEAE												
....NAVICULA	14	2	--	-	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	420#	73	--	-	--	-	--	-	--	-	820#	100
..HORMOGONALES												
...OSCILLATORIACEAE												
....LYNGBYA	110#	20	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	5.5	4.5	5.5	3.5	2.5	3.0	.0	.0	.0	.5	.5	.5
2	5.5	5.0	5.0	3.0	2.0	2.5	.0	.0	.0	.5	.0	.5
3	5.5	5.0	5.0	2.5	2.0	2.5	.0	.0	.0	.0	.0	.0
4	5.5	5.0	5.0	2.5	2.0	2.0	.0	.0	.0	.0	.0	.0
5	5.5	5.0	5.0	2.0	1.5	2.0	.0	.0	.0	.0	.0	.0
6	5.5	5.0	5.5	2.0	1.0	2.0	.0	.0	.0	.0	.0	.0
7	5.5	4.5	5.5	2.0	1.0	2.0	.0	.0	.0	.0	.0	.0
8	5.5	4.5	5.0	2.0	1.5	2.0	.0	.0	.0	.0	.0	.0
9	5.0	4.5	4.5	1.5	.0	1.0	.5	.0	.0	.0	.0	.0
10	4.5	4.5	4.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
11	5.0	4.5	4.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	5.0	4.5	5.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13	5.0	4.5	4.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
14	4.5	4.0	4.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
15	5.0	4.0	4.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
16	4.5	4.5	4.5	.5	.0	.0	.0	.0	.0	.0	.0	.0
17	4.5	4.0	4.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
18	5.5	4.5	5.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19	5.5	4.5	5.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20	4.5	4.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
21	4.0	4.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
22	4.0	4.0	4.0	.0	.0	.0	.0	.0	.0	.5	.0	.5
23	4.0	4.0	4.0	.0	.0	.0	.0	.0	.0	.5	.0	.5
24	4.0	3.5	4.0	.0	.0	.0	.0	.0	.0	---	---	---
25	3.5	3.5	3.5	.0	.0	.0	.0	.0	.0	---	---	---
26	4.0	3.5	3.5	.0	.0	.0	.0	.0	.0	---	---	---
27	4.0	3.5	4.0	.5	.0	.0	.0	.0	.0	---	---	---
28	3.5	3.5	3.5	.5	.5	.5	.0	.0	.0	---	---	---
29	3.5	3.0	3.0	.5	.5	.5	.0	.0	.0	---	---	---
30	3.0	3.0	3.0	.5	.0	.0	.0	.0	.0	---	---	---
31	3.5	3.5	3.5	---	---	---	.5	.0	.0	---	---	---
MONTH	5.5	3.0	4.5	3.5	.0	.5	.5	.0	.0		.0	

15024800 STIKINE RIVER NEAR WRANGELL--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1				---	---	---	.5	.0	.5	4.5	3.5	4.0
2				---	---	---	.5	.0	.5	4.5	4.0	4.5
3				---	---	---	.5	.5	.5	4.0	3.5	4.0
4				---	---	---	.5	.5	.5	3.5	3.0	3.5
5				---	---	---	.5	.0	.5	4.5	3.0	4.0
6				---	---	---	.5	.0	.0	4.5	4.0	4.0
7				---	---	---	.0	.0	.0	4.5	4.0	4.5
8				---	---	---	.5	.0	.5	5.5	4.5	5.0
9				---	---	---	.5	.0	.5	5.5	5.0	5.0
10				---	---	---	.5	.5	.5	5.0	4.5	5.0
11				---	---	---	.5	.0	.5	5.0	4.0	4.5
12				---	---	---	.5	.5	.5	6.5	5.0	5.5
13				---	---	---	1.0	.5	.5	6.0	5.0	5.5
14				---	---	---	1.0	.5	1.0	6.5	5.0	5.5
15				.5	.0	.0	2.0	1.0	1.5	7.0	6.0	6.5
16				.5	.0	.0	2.5	1.5	2.0	6.5	6.0	6.5
17				.5	.5	.0	2.5	1.5	2.0	6.5	6.0	6.5
18				.5	.0	.5	3.0	1.5	2.5	6.5	6.0	6.0
19				.5	.0	.5	3.0	1.5	2.0	6.5	6.0	6.0
20				.5	.0	.5	3.0	1.0	2.0	7.5	6.0	6.0
21				.5	.0	.5	3.0	2.0	2.5	7.5	7.0	7.0
22				.5	.0	.0	3.5	2.0	3.0	7.0	6.0	6.5
23				.5	.0	.0	4.0	2.5	3.0	5.5	5.0	5.5
24				.5	.0	.0	4.0	3.0	3.5	6.0	5.5	5.5
25				.5	.0	.0	4.5	3.0	3.5	5.5	5.0	5.5
26				.5	.0	.0	4.5	3.5	4.0	5.0	4.5	5.0
27				.0	.0	.0	4.5	3.5	4.0	6.0	4.5	5.0
28				.5	.0	.0	4.5	3.5	4.0	6.0	5.5	5.5
29				.5	.0	.0	4.5	3.0	4.0	7.0	6.0	6.5
30				.5	.0	.5	4.5	3.5	4.0	7.0	6.5	7.0
31				.5	.0	.5	---	---	---	7.5	7.0	7.0
MONTH					.0		4.5	.0	2.0	7.5	3.0	5.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.0	6.5	7.0	8.5	7.5	8.0	6.5	6.0	6.0	7.0	6.5	6.5
2	7.0	6.0	6.5	8.5	7.5	8.0	6.5	6.0	6.5	6.5	6.0	6.0
3	7.0	6.5	7.0	8.0	7.5	8.0	8.0	6.5	7.0	6.5	6.0	6.5
4	6.5	6.0	6.0	8.0	7.0	7.5	8.5	7.5	8.0	6.5	6.0	6.5
5	6.0	5.5	5.5	9.0	7.5	8.0	8.0	7.5	7.5	6.5	6.0	6.0
6	6.5	6.0	6.0	8.5	7.0	8.0	8.5	7.5	8.0	6.0	5.5	6.0
7	6.5	6.0	6.5	8.0	7.0	7.5	8.0	7.5	8.0	7.0	6.0	6.5
8	6.5	6.0	6.5	8.5	7.5	8.0	8.5	8.0	8.0	7.5	7.0	7.5
9	7.0	6.0	6.5	8.5	7.5	8.0	8.5	7.5	8.0	7.0	6.0	6.5
10	7.5	6.5	7.0	8.0	7.0	7.5	8.5	7.5	8.0	6.5	6.0	6.0
11	8.5	7.0	8.0	9.0	7.5	8.0	8.5	7.5	8.0	6.5	6.0	6.5
12	8.0	7.5	8.0	8.5	7.5	8.0	8.0	7.0	7.5	6.5	6.0	6.5
13	7.5	7.5	7.5	8.0	7.0	7.5	8.5	7.5	8.0	6.0	5.5	6.0
14	8.0	7.0	7.5	8.5	8.0	8.0	8.0	7.5	8.0	6.5	5.5	6.0
15	8.0	7.0	7.5	8.5	7.5	8.0	7.5	6.5	7.0	6.5	5.5	6.0
16	9.0	7.0	8.0	8.5	7.5	8.0	8.0	6.5	7.5	5.5	5.0	5.5
17	8.5	8.0	8.0	7.5	7.0	7.5	8.0	7.0	8.0	5.5	5.0	5.5
18	8.5	7.5	8.0	8.0	6.5	7.5	8.5	7.5	8.0	6.0	5.5	5.5
19	9.0	8.0	8.5	8.0	6.5	7.5	8.5	7.5	8.0	6.5	5.5	6.0
20	8.0	7.5	8.0	6.5	6.0	6.5	8.0	7.5	8.0	6.0	5.5	6.0
21	8.5	8.0	8.0	7.0	6.5	6.5	8.5	7.5	8.0	5.5	5.5	5.5
22	9.5	8.0	8.5	6.5	6.0	6.0	8.5	7.5	8.0	5.5	5.5	5.5
23	9.0	8.0	8.5	7.5	6.0	7.0	8.5	7.5	8.0	5.5	5.0	5.5
24	8.0	7.5	8.0	8.5	7.0	7.5	8.0	7.5	8.0	5.5	5.0	5.5
25	9.0	7.5	8.0	8.5	7.5	8.0	8.0	7.0	7.5	6.0	5.0	5.5
26	9.5	8.5	9.0	9.0	7.5	8.5	8.0	7.0	7.5	5.5	5.5	5.5
27	9.5	8.5	9.0	8.5	8.0	8.5	8.0	7.0	7.5	5.5	5.0	5.0
28	9.0	8.5	9.0	9.0	8.0	8.5	8.0	7.5	7.5	5.0	5.0	5.0
29	8.5	7.0	8.0	9.0	8.0	8.5	8.0	7.5	7.5	5.5	5.0	5.0
30	7.5	7.0	7.0	9.0	7.5	8.0	7.5	7.0	7.0	5.5	5.0	5.0
31	---	---	---	7.5	6.5	7.0	7.0	6.5	7.0	---	---	---
MONTH	9.5	5.5	7.5	9.0	6.0	7.5	8.5	6.0	7.5	7.5	5.0	6.0
YEAR	9.5	.0										

15028300 FARRAGUT RIVER NEAR PETERSBURG

LOCATION.--57°10'24", long 133°06'36", in NE¼SW¼ sec.24, T.54 S., R.77 E., Hydrologic Unit 19060000, in Tongass National Forest, on left bank 2.25 mi (3.6 km) upstream from mouth and 26 mi (42 km) from Petersburg.

DRAINAGE AREA.--151 mi² (391 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 25 ft (7.6 m), from topographic map.

REMARKS.--Records good except those for Oct. 1 to Nov. 4 and Jan. 6 to Mar. 18, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 10,000 ft³/s (283 m³/s) Oct. 18, 1978; minimum daily, 95 ft³/s (2.69 m³/s) Feb. 22, 23, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 10,000 ft³/s (283 m³/s) Oct. 18; minimum daily, 95 ft³/s (2.69 m³/s) Feb. 22 and 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2100	7200	832	215	180	112	243	2240	3090	3110	4990	2480
2	2800	6600	1000	185	178	130	218	2010	3920	3010	5100	2640
3	6800	4500	876	153	172	200	202	2470	3920	3300	3680	2320
4	5200	1900	707	155	168	400	190	2310	3590	3310	3120	2270
5	2500	2120	755	163	162	680	449	2010	3420	3160	2980	1930
6	2100	2470	699	137	158	600	546	1880	2880	3100	2990	1710
7	3500	1570	798	130	152	620	443	1960	2570	3200	2880	1550
8	2800	1050	1010	125	148	640	476	2120	2300	3070	2570	1650
9	3700	792	1050	122	144	680	398	1730	2150	3140	2370	1500
10	3500	666	966	115	139	630	390	1770	2070	3410	2280	1820
11	4200	799	758	112	134	590	373	2280	1950	3500	2220	1640
12	3300	707	644	110	129	570	391	1780	2020	3240	2130	2880
13	8000	604	1010	110	128	550	418	1510	2020	3060	2290	8520
14	6200	561	981	109	124	540	367	1380	2470	2900	2420	6360
15	4500	614	752	109	115	540	342	1250	2440	3030	2540	6940
16	2500	521	583	110	110	550	354	1250	2330	3220	2460	5100
17	4000	398	447	113	108	570	359	1640	2380	5260	2450	4400
18	10000	419	408	118	103	587	394	1680	2470	5680	2480	3120
19	6000	485	439	132	100	699	469	1430	2630	7400	2390	2340
20	4800	527	629	140	97	913	525	1300	2630	7840	2580	1810
21	2000	379	479	153	96	828	583	1280	2620	7120	2520	1510
22	2700	303	387	165	95	667	732	1560	2530	3440	2440	1570
23	3700	593	358	172	95	674	1010	3020	2580	5040	2670	2210
24	2000	870	342	180	96	650	1150	3330	2570	3950	2760	2380
25	2700	1010	310	190	97	589	1190	3360	2650	3580	2820	3000
26	2100	1060	282	192	99	506	1250	3550	2640	3370	2860	2250
27	1600	1220	223	193	101	439	1470	2940	2670	3180	2740	3660
28	1300	1090	268	191	105	382	1890	2280	2730	2930	2440	3540
29	1000	1050	266	190	---	337	2120	1970	5090	2710	2190	2330
30	2700	924	206	188	---	294	2170	1940	4030	2840	1980	2460
31	9000	---	163	187	---	261	---	2000	---	3400	2440	---
TOTAL	119300	43002	18628	4664	3533	16428	21112	63230	83360	118500	84780	87890
MEAN	3848	1433	601	150	126	530	704	2040	2779	3823	2735	2930
MAX	10000	7200	1050	215	180	913	2170	3550	5090	7840	5100	8520
MIN	1000	303	163	109	95	112	190	1250	1950	2710	1980	1500
CFSM	25.5	9.49	3.98	.99	.83	3.51	4.66	13.5	18.4	25.3	18.1	19.4
IN.	29.39	10.59	4.59	1.15	.87	4.05	5.20	15.58	20.54	29.19	20.89	21.65
AC-FT	236600	85290	36950	9250	7010	32580	41880	125400	165300	235000	168200	174300

CAL YR 1978 TOTAL 552594 MEAN 1514 MAX 10000 MIN 155 CFSM 10.0 IN 136.13 AC-FT 1096000
WTR YR 1979 TOTAL 664427 MEAN 1820 MAX 10000 MIN 95 CFSM 12.1 IN 163.69 AC-FT 1318000

NOTE--No gage-height record Oct. 1 to Nov. 4.

15028300 FARRAGUT RIVER NEAR PETERSBURG--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 and 1979.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
MAY					
01...	1000	1920	26	6.8	3.5

15050000 GOLD CREEK AT JUNEAU

LOCATION.--Lat 58°18'25", long 134°24'05", City and Borough of Juneau, Hydrologic Unit 19060000, on left bank 10 ft (3 m) downstream from highway bridge, 150 ft (46 m) upstream from Alaska Electric Light and Power Company dam and diversion, 0.5 mi (0.8 km) northeast of Juneau, and 1 mi (1.6 km) upstream from mouth at Gastineau Channel.

DRAINAGE AREA.--9.76 mi² (25.28 km²).

PERIOD OF RECORD.--July 1916 to December 1920 (monthly discharge only), October 1946 to September 1948, October 1949 to current year.

REVISED RECORDS.--WSP 1372: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 245 ft (74.7 m), from topographic map. July 20, 1916 to Dec. 31, 1920, at site 50 ft (15 m) upstream at different datum. Sept. 11, 1946 to Sept. 30, 1948, nonrecording gage at site 0.7 mi (1.1 km) downstream at different datum.

REMARKS.--Records good except those for Feb. 21 to Mar. 23, which are poor.

AVERAGE DISCHARGE.--36 years, 107 ft³/s (3.03 m³/s), 148.88 in/yr (3,782 mm/yr), 77,520 acre ft/yr (95.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,650 ft³/s (75.0 m³/s) Aug. 12, 1961, gage height, 6.57 ft (2.003 m), from rating curve extended above 1,500 ft³/s (42 m³/s); no flow at times during winters of 1951, 1956 and 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft³/s (25.5 m³/s) and maximum (*).

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 18	1055	*2,130	60.3	*6.18	1.884
Oct. 30	2215	1,120	31.7	5.09	1.551
July 21	Unknown	(a)980	2.78	Unknown	

(a) Daily discharge.

Minimum daily discharge, 1.2 ft³/s (0.034 m³/s) Mar. 2 and 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	249	66	11	3.5	1.3	9.8	119	353	157	350	108
2	325	174	112	10	3.3	1.2	9.2	122	674	217	351	143
3	261	132	88	10	3.3	1.2	8.9	158	534	243	189	128
4	280	106	64	9.8	3.3	1.3	8.3	174	440	302	149	119
5	376	103	52	8.9	3.2	4.0	10	186	364	257	139	123
6	555	138	44	8.6	3.0	8.9	9.5	165	341	388	135	151
7	359	97	46	8.3	2.8	15	9.8	132	269	585	137	127
8	315	77	74	7.7	2.8	8.0	10	112	221	368	109	126
9	285	62	83	7.7	2.6	12	10	93	196	270	98	122
10	291	56	59	7.5	2.2	14	10	94	184	240	88	189
11	303	49	45	7.0	2.1	13	10	163	171	240	83	171
12	219	44	38	6.7	2.1	14	11	114	154	240	84	472
13	279	39	38	6.3	2.1	16	12	94	159	250	86	397
14	192	34	34	6.1	2.1	15	12	85	196	260	90	201
15	305	32	30	5.9	2.0	16	12	83	189	275	90	123
16	139	29	26	7.2	2.0	15	12	86	188	300	93	104
17	510	28	22	6.7	2.0	16	13	142	201	320	95	156
18	1150	27	24	7.0	2.0	17	15	140	224	360	84	118
19	398	25	24	6.3	1.9	20	17	129	208	440	73	88
20	307	23	24	5.7	1.9	32	20	107	170	530	68	75
21	255	22	18	5.3	2.2	24	23	104	167	980	73	71
22	341	22	18	5.1	1.8	18	29	117	174	520	96	113
23	356	25	17	4.9	1.7	17	41	196	174	258	104	226
24	273	31	16	4.8	1.7	15	47	226	162	208	93	148
25	405	45	15	4.5	1.6	14	47	222	192	179	81	179
26	241	107	14	4.5	1.5	14	51	231	186	168	79	152
27	202	355	13	4.3	1.5	14	70	210	173	157	76	296
28	143	203	13	4.1	1.4	13	99	175	261	140	82	228
29	117	119	12	4.0	---	12	119	165	324	125	79	148
30	561	85	12	3.7	---	11	124	179	201	137	127	165
31	536	---	11	3.6	---	10	---	194	---	178	126	---
TOTAL	10371	2538	1152	203.2	63.6	402.9	879.5	4517	7450	9292	3607	4967
MEAN	335	84.6	37.2	6.55	2.27	13.0	29.3	146	248	300	116	166
MAX	1150	355	112	11	3.5	32	124	231	674	980	351	472
MIN	92	22	11	3.6	1.4	1.2	8.3	83	154	125	68	71
CFSM	34.3	8.67	3.81	.67	.23	1.33	3.00	15.0	25.4	30.7	11.9	17.0
IN.	39.52	9.67	4.39	.77	.24	1.54	3.35	17.21	28.39	35.41	13.75	18.93
AC-FT	20570	5030	2280	403	126	799	1740	8960	14780	18430	7150	9850

CAL YR 1978 TOTAL 38781.5 MEAN 106 MAX 1150 MIN 1.6 CFSM 10.9 IN 147.80 AC-FT 76920
WTR YR 1979 TOTAL 45443.2 MEAN 125 MAX 1150 MIN 1.2 CFSM 12.8 IN 173.19 AC-FT 90140

15052500 MENDENHALL RIVER NEAR AUKE BAY

LOCATION.--Lat 58°25'05", long 134°32'40", in SW¼NE¼ sec.8, T.40 S., R.66 E., City and Borough of Juneau, Hydrologic Unit 19060000, at east end of Mendenhall Lake, 250 ft (76 m) northwest of Mendenhall Visitors Center, 4.2 mi (6.8 km) northeast of Auke Bay, and 7 mi (11 km) upstream from mouth at Fritz Cove.

DRAINAGE AREA.--85.1 mi² (220.4 km²).

PERIOD OF RECORD.--May 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 60 ft (18 m), from topographic map.

REMARKS.--Records fair except those for Oct. 1-19 and Nov. 23 to Mar. 4, which are poor.

AVERAGE DISCHARGE.--14 years, 1,106 ft³/s (31.32 m³/s), 176.49 in/yr (4.483 mm/yr), 801,300 acre-ft/yr (983 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,820 ft³/s (278 m³/s) Sept. 28, 1976, gage height, 8.67 ft (2.643 m); maximum gage height, 8.94 ft (2.725 m) Aug. 24, 1966; minimum daily discharge, 19 ft³/s (0.54 m³/s) Mar. 1-3, 1969 and Mar. 7-11, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,600 ft³/s (130 m³/s) and maximum (*).

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 18	Unknown	*(a)7,400	210	Unknown		Sept.15	0845	7,130	202	7.75	2.362
July 20	0215	7,660	217	7.97	2.429						

(a) Daily discharge.

Minimum daily discharge, 20 ft³/s (0.57 m³/s) Feb. 19 and [illegible].

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1000	1120	260	62	27	34	65	468	1030	2080	4440	2570
2	2890	947	250	59	26	34	62	498	1750	2220	4490	2780
3	2500	746	230	57	25	36	61	498	1970	2660	3350	2530
4	2350	559	215	55	25	38	60	487	1940	2630	3080	2300
5	3300	440	205	53	25	46	62	547	2150	2580	3130	1910
6	4600	428	215	52	24	58	65	567	2060	2880	3000	1860
7	3200	404	235	51	24	76	69	551	1840	4280	3240	2090
8	2750	344	255	49	24	91	71	520	1560	4050	2810	2380
9	2500	304	250	47	23	99	69	478	1350	3650	2600	1810
10	2550	272	220	46	23	112	76	412	1270	3680	2570	1570
11	2700	253	195	44	23	104	78	425	1310	4180	2580	1580
12	2000	233	185	43	22	101	76	429	1380	3590	2610	1960
13	2400	216	175	42	22	101	73	405	1530	3320	2710	3030
14	1750	205	168	41	22	101	76	389	1360	3480	2830	4900
15	2500	191	164	41	21	103	75	393	1200	3290	3000	5440
16	1300	178	155	42	21	98	78	399	1270	3240	2840	3290
17	4500	169	150	43	21	91	75	447	1350	4560	2770	3260
18	7400	165	143	43	21	87	72	471	1410	6500	2930	2750
19	4600	160	125	43	20	92	83	496	1510	6800	2870	1980
20	3660	154	115	42	20	113	87	494	1460	7210	2750	1520
21	2350	150	110	43	21	127	97	497	1440	5950	2700	1390
22	2070	153	102	38	21	118	106	497	1530	4960	2930	1730
23	2380	160	97	36	21	112	140	622	1630	4540	3380	2460
24	1340	170	92	35	22	110	172	799	1580	3790	3350	2660
25	1200	180	86	33	34	103	183	796	1710	3620	3140	2430
26	1020	195	82	32	34	97	191	871	1780	3590	3020	1500
27	815	210	77	30	34	90	211	1030	1750	3420	2650	1610
28	690	230	72	29	34	85	264	865	1970	3250	2330	2000
29	556	245	70	27	---	76	349	790	2690	2880	2260	1940
30	773	255	68	27	---	72	419	786	2470	2810	2070	1300
31	1380	---	65	27	---	68	---	800	---	3210	2330	---
TOTAL	75024	9436	4831	1312	680	2673	3565	17727	49250	118900	90760	70530
MEAN	2420	315	156	42.3	24.3	86.2	119	572	1642	3835	2928	2351
MAX	7400	1120	260	62	34	127	419	1030	2690	7210	4490	5440
MIN	556	150	65	27	20	34	60	389	1030	2080	2070	1300
CFSM	28.4	3.70	1.83	.50	.29	1.01	1.40	6.72	19.3	45.1	34.4	27.6
IN.	32.80	4.12	2.11	.57	.30	1.17	1.56	7.75	21.53	51.97	39.67	30.83
AC-FT	148800	18720	9580	2600	1350	5300	7070	35160	97690	235800	180000	139900

CAL YR 1978 TOTAL 413302 MEAN 1132 MAX 7400 MIN 20 CFSM 13.3 IN 180.67 AC-FT 819800
WTR YR 1979 TOTAL 444688 MEAN 1218 MAX 7400 MIN 20 CFSM 14.3 IN 194.39 AC-FT 882000

NOTE.--No gage-height record Oct. 1-19.

15056100 SKAGWAY RIVER AT SKAGWAY
(National stream-quality accounting network station)

LOCATION.--Lat 59°28'01", long 135°18'03", Hydrologic Unit 19060000, on left bank 800 ft (240 m) downstream from highway bridge, on dike near end of 20th Street in City of Skagway, and 1 mi (1.6 km) upstream from mouth at Taiya Inlet.

DRAINAGE AREA.--145 mi² (376 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 20 ft (6.1 m), from topographic map. Prior to Mar. 3, 1976, at site 0.85 mi (1.4 km) downstream at different datum.

REMARKS.--Records good except those for Dec. 18 to Mar. 17, which are poor. Streamflow is augmented and large diurnal fluctuations are caused by meltage from glaciers that cover 17 percent of the basin.

AVERAGE DISCHARGE.--16 years, 543 ft³/s (15.38 m³/s), 50.85 in/yr (1,280 mm/yr), 393,400 acre-ft/yr (485 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,600 ft³/s (385 m³/s) Sept. 15, 1967, gage height, 8.50 ft (2.519 m), site and datum then in use, from rating curve extended above 4,000 ft³/s (113 m³/s) on basis of a contracted opening measurement of peak flow; minimum daily, 6.0 ft³/s (0.17 m³/s) Mar. 31, 1974.

EXTREMES FOR CURRENT PERIOD.--Peak discharges above base of 3,000 ft³/s (85 m³/s) and maximum(*).

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 7	0430	3,280	92.9	16.08	4.901
Oct. 18	1630	7,080	201	17.44	5.316
July 6	1645	8,500	241	17.80	5.425
July 18	0515	*8,800	249	*17.88	5.450
Sept.13	1900	5,170	146	16.84	5.133

Minimum daily discharge, 9.8 ft³/s (0.28 m³/s), Feb. 16-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	507	292	116	26	27	12	29	603	1830	1620	2000	631
2	496	241	120	28	23	12	26	641	2370	2520	1440	1310
3	474	210	120	29	20	13	25	549	2600	3300	1510	1230
4	455	189	112	30	18	14	26	504	2410	3380	1960	1020
5	485	186	107	31	16	14	28	504	2500	3710	2040	1080
6	936	172	103	32	14	15	29	505	2520	5550	1810	1330
7	2790	163	102	32	13	16	37	513	1900	4210	1490	983
8	1940	144	104	32	12	17	31	444	1610	2180	1340	837
9	1300	113	107	32	11	18	32	394	1540	1870	1320	661
10	961	121	105	30	11	19	33	366	1610	2240	1210	653
11	845	133	100	26	11	21	33	379	1870	3680	1210	597
12	691	111	95	23	10	22	42	333	2150	2580	1300	950
13	652	118	96	22	10	24	46	323	2020	2680	1520	4060
14	656	110	95	22	10	26	48	331	2150	1950	1680	3520
15	712	95	92	23	9.9	29	48	379	2000	1850	2160	2380
16	653	75	74	24	9.8	30	51	443	2050	1480	2290	1570
17	601	89	44	25	9.8	34	54	423	1860	3720	2260	1470
18	4540	72	40	26	9.8	44	61	416	1700	7010	2040	1010
19	1370	83	37	28	9.8	80	72	430	2050	4190	1810	737
20	628	91	36	29	9.9	89	82	452	2130	5620	1650	585
21	460	85	36	30	10	69	97	517	1860	4380	1530	521
22	393	89	35	32	10	53	141	549	2030	2920	1590	580
23	406	90	35	33	10	45	188	690	1920	2260	1340	746
24	326	85	34	34	10	43	206	783	2120	2030	1510	654
25	354	81	33	36	11	37	214	719	2070	2090	1710	576
26	314	85	32	37	11	33	259	872	1970	2330	1730	427
27	271	118	28	37	11	32	321	1240	1870	2050	1400	430
28	241	135	24	36	12	31	401	1330	1830	1910	1250	447
29	216	130	23	34	---	28	502	1400	2120	1710	1030	357
30	302	123	24	32	---	28	565	1380	1490	1540	975	321
31	440	---	25	29	---	25	---	1310	---	1540	778	---
TOTAL	25415	3829	2134	920	350.0	973	3727	19722	60150	90090	48883	31673
MEAN	820	128	68.8	29.7	12.5	31.4	124	636	2005	2906	1577	1056
MAX	4540	292	120	37	27	89	565	1400	2600	7010	2290	4060
MIN	216	72	23	22	9.8	12	25	323	1490	1480	778	321
CFSM	5.66	.88	.47	.21	.09	.22	.86	4.39	13.8	20.0	10.9	7.28
IN.	6.52	.98	.55	.24	.09	.25	.96	5.06	15.43	23.11	12.54	8.13
AC-FT	50410	7590	4230	1820	694	1930	7390	39120	119300	178700	96960	62820

CAL YR 1978 TOTAL 214923.0 MEAN 589 MAX 4540 MIN 15 CFSM 4.06 IN 55.14 AC-FT 426300
WTR YR 1979 TOTAL 287866.0 MEAN 789 MAX 7010 MIN 9.8 CFSM 5.44 IN 73.85 AC-FT 571000

15056100 SKAGWAY RIVER AT SKAGWAY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1949, 1966, 1968-69, 1972, 1975 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: April to September 1979.

INSTRUMENTATION.--Temperature recorder since Jan. 9, 1979.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 9.5°C July 10 and 27; minimum, 0.0°C on many days during winter.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
NOV											
28...	1330	133	62	7.7	1.5	1.4	13.4	<1	K20	27	6
28...	1400	133	62	7.7	1.5	--	13.4	--	--	--	--
JAN											
09...	1330	32	82	7.1	.0	--	--	--	--	--	--
09...	1400	32	82	7.1	.0	.40	14.1	<1	K1	33	2
MAR											
15...	1400	29	93	7.2	.0	2.5	14.5	<1	--	39	7
15...	1430	29	93	7.2	.0	--	--	--	--	--	--
APR											
11...	1000	33	80	7.6	.5	1.1	13.8	K1	K1	31	1
11...	1030	33	--	--	--	--	--	--	--	--	--
MAY											
31...	1800	1250	42	7.4	7.0	3.5	10.5	K4	K2	18	0
JUL											
10...	2000	1980	31	7.6	9.0	58	10.1	K7	K14	11	0
AUG											
14...	1300	1280	28	7.3	6.0	24	11.4	--	--	11	0
SEP											
25...	1330	536	50	7.2	7.0	9.6	11.2	K1	--	19	2

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
NOV											
28...	8.8	1.2	2.8	1.0	26	5.9	3.2	.2	4.3	42	40
28...	--	--	--	--	--	--	--	--	--	--	--
JAN											
09...	--	--	--	--	--	--	--	--	--	--	--
09...	11	1.4	1.4	1.2	38	3.9	1.1	.2	3.7	43	43
MAR											
15...	13	1.5	1.8	1.2	38	4.3	1.5	.3	4.1	44	46
15...	--	--	--	--	--	--	--	--	--	--	--
APR											
11...	10	1.4	1.6	1.1	36	6.5	1.6	.3	4.2	43	45
11...	--	--	--	--	--	--	--	--	--	--	--
MAY											
31...	5.7	.8	1.2	.9	22	3.0	.5	.3	2.2	28	25
JUL											
10...	3.6	.5	.4	.9	16	3.8	.6	.2	1.3	10	19
AUG											
14...	3.4	.5	.4	.8	15	2.0	.3	.1	1.0	18	16
SEP											
25...	6.5	.7	.7	1.1	21	4.6	.4	.2	2.1	47	27

K NON-IDEAL COLONY COUNT

15056100 SKAGWAY RIVER AT SKAGWAY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
NOV 28...	.30	--	.00	.21	.21	.01	.20	.51	--	.000	.000
28...	--	--	--	--	--	--	--	--	--	--	--
JAN 09...	--	--	--	--	--	--	--	--	--	--	--
09...	.39	--	.00	.05	.05	.00	.13	.44	--	.010	.010
MAR 15...	.29	--	.05	.00	.02	.00	.03	.31	--	.000	.010
15...	--	--	--	--	--	--	--	--	--	--	--
APR 11...	.42	--	.01	.20	.21	.11	.10	.63	--	.010	.000
11...	--	--	--	--	--	--	--	--	--	--	--
MAY 31...	.12	--	.01	.08	.09	.04	.05	.21	--	.000	.010
JUL 10...	.05	--	.06	.81	.87	.79	.08	.92	--	.170	.030
AUG 14...	.02	--	.00	.06	.06	.00	.14	.08	--	.030	.000
SEP 25...	.08	.06	.01	.35	.36	.03	.33	.44	.39	.020	.000

DATE	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)
NOV 28...	0	--	0	0	0	0	1	1	0	10	0
28...	--	--	--	--	--	--	--	--	--	--	--
JAN 09...	--	--	--	--	--	--	--	--	--	--	--
09...	0	--	0	100	50	50	1	0	<1	10	10
MAR 15...	0	--	0	0	0	0	1	1	0	0	0
15...	--	--	--	--	--	--	--	--	--	--	--
APR 11...	1	--	0	0	0	40	2	0	6	0	0
11...	--	--	--	--	--	--	--	--	--	--	--
MAY 31...	0	--	0	100	100	0	--	--	0	10	10
JUL 10...	1	--	1	100	80	20	0	0	1	0	0
AUG 14...	1	--	0	200	200	20	0	0	<1	10	10
SEP 25...	1	0	1	0	0	30	0	0	<1	10	0

DATE	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
NOV 28...	20	2	2	0	15	15	0	260	190	70	--
28...	--	--	--	--	--	--	--	--	--	--	--
JAN 09...	--	--	--	--	--	--	--	--	--	--	--
09...	0	2	0	<3	2	2	0	80	70	10	15
MAR 15...	0	0	0	0	5	5	0	60	50	10	14
15...	--	--	--	--	--	--	--	--	--	--	--
APR 11...	10	3	0	<3	2	2	0	180	160	20	15
11...	--	--	--	--	--	--	--	--	--	--	--
MAY 31...	0	0	0	0	3	3	0	490	470	20	--
JUL 10...	0	4	1	<3	6	6	0	8000	8000	10	14
AUG 14...	0	0	0	<3	38	29	9	3800	3800	20	38
SEP 25...	10	0	0	<3	0	0	0	1800	--	30	9

15056100 SKAGWAY RIVER AT SKAGWAY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)
NOV											
28...	--	0	0	0	0	1.5	2.0	1.8	0	0	0
28...	--	--	--	--	--	--	--	--	--	--	--
JAN											
09...	--	--	--	--	--	--	--	--	--	--	--
09...	15	0	10	9	<1	.3	.2	.1	0	0	0
MAR											
15...	14	0	0	0	10	.1	.0	.1	0	0	0
15...	--	--	--	--	--	--	--	--	--	--	--
APR											
11...	12	3	10	9	<1	.1	.1	.0	0	0	0
11...	--	--	--	--	--	--	--	--	--	--	--
MAY											
31...	--	0	10	10	0	.3	.2	.1	0	0	1
JUL											
10...	14	0	160	160	2	2.0	.9	1.1	0	0	0
AUG											
14...	37	1	70	70	3	.1	.1	.0	0	0	0
SEP											
25...	9	0	40	40	1	1.2	.9	.3	0	0	0

DATE	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM
NOV											
28...	0	0	0	110	110	0	3.3	.1	2	.72	--
28...	--	--	--	--	--	--	--	--	--	--	--
JAN											
09...	--	--	--	--	--	--	--	--	--	--	--
09...	0	0	0	10	7	<3	7.6	.1	5	.43	--
MAR											
15...	0	0	0	20	10	10	4.0	.1	2	.16	--
15...	--	--	--	--	--	--	--	--	--	--	--
APR											
11...	0	0	0	20	10	6	3.1	.3	3	.27	--
11...	--	--	--	--	--	--	--	--	--	--	--
MAY											
31...	0	0	0	10	10	0	--	2.0	14	47	--
JUL											
10...	0	0	0	30	30	<3	2.0	2.2	248	1330	--
AUG											
14...	0	0	0	50	30	20	1.0	.3	153	529	17
SEP											
25...	0	0	0	10	7	<3	2.2	.3	26	38	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
NOV										
28...	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--
JAN										
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	26	--	--	--	--	--
MAR										
15...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
APR										
11...	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--
MAY										
31...	--	--	--	--	26	32	46	69	83	100
JUL										
10...	13	20	29	43	55	65	77	92	98	100
AUG										
14...	20	26	33	45	57	70	83	94	98	100
SEP										
25...	--	--	--	--	78	--	--	--	--	--

15056100 SKAGWAY RIVER AT SKAGWAY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO SEPTEMBER 1979

DATE	NOV 28.78		JAN 9.79		MAR 15.79		APR 11.79	
TIME	1330		1400		1400		1000	
TOTAL CELLS/ML	14		120		0		70	
DIVERSITY: DIVISION	0.0		0.5		0.0		1.0	
.CLASS	0.0		0.5		0.0		1.4	
..ORDER	0.0		0.5		0.0		1.4	
...FAMILY	0.0		0.5		0.0		1.4	
....GENUS	0.0		0.5		0.0		1.4	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	110#	88	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	--	-	15	13	--	-	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	--	-	14#	20
...NAVICULACEAE								
....NAVICULA	14#	100	--	-	--	-	--	-
...NITZSCHIACEAE								
....NITZSCHIA	--	-	--	-	--	-	--	-
.XANTHOPHYCEAE								
..HETEROCOCCALES								
...CENTRITRACTACEAE								
....CENTRITRACTUS	--	-	--	-	--	-	14#	20
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....TRACHELOMONAS	--	-	--	-	--	-	42#	60

DATE	MAY 31.79		AUG 14.79		SEP 25.79	
TIME	1800		1300		1330	
TOTAL CELLS/ML	13		5		26	
DIVERSITY: DIVISION	0.0		0.0		0.0	
.CLASS	0.0		0.0		0.0	
..ORDER	0.0		0.0		1.0	
...FAMILY	0.0		0.0		1.0	
....GENUS	0.0		0.0		1.0	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	--	-	--	-	--	-
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	13#	100	--	-	13#	50
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	--	-	5#	100	--	-
...NAVICULACEAE						
....NAVICULA	--	-	--	-	--	-
...NITZSCHIACEAE						
....NITZSCHIA	--	-	--	-	13#	50
.XANTHOPHYCEAE						
..HETEROCOCCALES						
...CENTRITRACTACEAE						
....CENTRITRACTUS	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)						
.EUGLENOPHYCEAE						
..EUGLENALES						
...EUGLENACEAE						
....TRACHELOMONAS	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

15056100 SKAGWAY RIVER AT SKAGWAY--Continued

TEMPERATURE, WATER (DEG. C), APRIL TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1							---	---	---	7.0	1.5	4.0
2							---	---	---	4.0	2.5	3.0
3							---	---	---	5.0	2.5	3.5
4							---	---	---	7.0	3.0	4.5
5							---	---	---	7.0	3.0	4.5
6							---	---	---	7.5	2.0	4.0
7							---	---	---	4.5	2.5	3.5
8							---	---	---	5.5	2.5	4.0
9							---	---	---	6.0	2.5	4.0
10							---	---	---	5.5	2.5	4.0
11							---	---	---	5.0	3.5	4.0
12							---	---	---	6.5	3.0	4.5
13							---	---	---	6.0	3.0	4.5
14							---	---	---	9.0	3.5	5.5
15							---	---	---	9.0	2.5	5.5
16							---	---	---	5.5	2.5	4.0
17							---	---	---	8.0	2.5	5.0
18							6.0	---	---	8.0	3.5	5.0
19							6.0	.0	2.5	7.5	3.5	5.5
20							6.0	.0	2.5	9.0	3.5	6.0
21							7.0	.5	3.0	8.0	3.5	5.5
22							6.0	1.0	3.0	8.0	3.5	5.5
23							6.0	1.0	3.0	7.5	4.0	5.5
24							5.0	1.0	3.0	5.5	3.5	4.5
25							7.0	2.0	3.5	7.0	2.0	5.0
26							7.0	1.5	3.5	6.5	4.0	5.0
27							7.0	1.0	3.5	8.0	3.5	5.0
28							7.0	1.0	3.5	5.5	3.5	4.5
29							7.0	1.5	3.5	6.5	3.5	5.0
30							7.0	1.5	3.5	5.5	3.5	4.5
31							---	---	---	7.0	3.5	5.5
MONTH							7.0	.0		9.0	1.5	4.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	4.5	4.0	4.0	8.5	5.0	6.5	7.0	5.5	6.0	7.0	4.5	5.5
2	6.5	4.0	5.0	7.5	5.5	6.5	6.5	5.0	5.5	6.0	5.5	6.0
3	5.5	4.0	4.5	6.5	5.5	6.0	8.5	5.5	6.5	6.5	4.5	5.5
4	7.5	3.5	5.0	6.0	5.0	5.5	9.0	5.0	6.5	6.0	5.0	5.5
5	6.0	4.0	5.0	6.5	5.0	5.5	9.0	5.5	7.0	7.0	5.0	6.0
6	6.0	4.0	4.5	5.5	5.0	5.5	7.0	6.0	6.5	6.5	5.5	6.0
7	6.5	4.0	5.0	6.0	4.0	5.5	7.0	5.5	6.0	6.5	5.0	5.5
8	8.0	3.5	5.5	8.0	4.5	6.0	7.5	5.5	6.5	6.0	5.0	5.5
9	7.5	4.0	5.5	7.0	5.5	6.5	7.0	5.5	6.5	6.5	5.0	5.5
10	7.5	4.5	6.0	9.5	5.5	7.0	8.0	5.5	6.5	6.0	5.0	5.5
11	6.5	4.5	5.5	8.0	6.0	7.0	8.0	5.5	6.5	6.5	5.0	5.5
12	8.0	4.0	6.0	9.0	5.0	7.0	8.0	6.0	6.5	6.0	5.0	5.5
13	8.5	4.0	6.0	7.0	6.0	6.5	8.5	6.0	7.0	7.0	5.5	6.0
14	7.5	4.5	6.0	7.5	5.0	6.5	8.5	5.5	6.5	6.0	5.0	5.5
15	8.0	4.0	6.0	8.0	5.5	6.5	7.5	6.0	6.5	6.0	5.0	5.5
16	8.5	4.0	6.0	7.0	5.0	6.0	6.5	5.5	6.0	5.5	5.0	5.0
17	6.5	4.5	5.5	6.5	5.5	6.0	6.5	5.5	6.0	6.5	4.5	5.5
18	8.0	4.5	6.0	6.5	---	5.5	8.5	5.5	6.5	7.0	5.0	5.5
19	8.0	5.0	6.0	5.0	---	---	8.5	5.0	6.5	7.0	5.0	5.5
20	6.5	5.0	5.5	7.0	---	5.0	8.5	5.0	6.5	7.0	4.0	5.5
21	6.0	4.5	5.5	7.5	---	5.5	7.5	5.5	6.5	6.0	4.0	5.0
22	7.5	4.5	5.5	7.0	---	3.0	8.5	6.0	6.5	7.5	5.0	6.0
23	8.0	4.5	6.0	7.5	5.0	6.0	8.5	4.0	6.5	7.0	5.0	5.5
24	7.0	5.0	6.0	9.0	---	---	8.5	5.0	6.5	6.5	5.0	5.5
25	8.0	5.0	6.5	8.5	---	---	8.0	5.0	6.5	6.5	5.0	5.5
26	8.0	5.0	6.0	9.0	---	6.5	8.0	5.0	6.0	6.0	4.0	5.0
27	6.5	5.0	5.5	9.5	---	---	7.5	5.0	6.0	6.0	5.0	5.5
28	6.5	5.0	5.5	8.5	5.5	7.0	8.0	5.5	6.5	6.5	5.0	5.5
29	7.5	4.5	6.0	8.0	5.5	6.5	7.0	5.5	6.0	6.5	4.0	5.0
30	6.5	4.5	5.5	7.0	5.5	6.0	7.0	5.0	5.5	5.0	4.0	4.5
31	---	---	---	7.5	5.5	6.5	7.5	5.0	5.5	---	---	---
MONTH	8.5	3.5	5.5	9.5	4.0	6.0	9.0	4.0	6.5	7.5	4.0	5.5
YEAR	9.5	.0										

15059500 WHIPPLE CREEK NEAR WARD COVE

LOCATION.--Lat 55°26'30", long 131°47'38", Gateway Borough, Hydrologic Unit 19060000, on Revillagigedo Island, on left bank 350 ft (107 m) upstream from old highway bridge on North Tongass Highway, 0.35 mi (0.56 km) upstream from mouth at Tongass Narrows, 2 mi (3 km) south of village of Knudsen Cove, and 3.4 mi (5.5 km) northwest of Ward Cove Post Office.

DRAINAGE AREA.--5.29 mi^2 (13.70 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 90 ft (27 m), from topographic map.

REMARKS.--Records good.

AVERAGE DISCHARGE.--11 years, 34.8 ft^3/s (0.986 m^3/s), 89.34 in/yr (2,270 mm/yr), 25,210 acre-ft/yr (31.1 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,830 ft^3/s (80.1 m^3/s) Nov. 19, 1968, gage height, 8.73 ft (2.661 m), from rating curve extended above 600 ft^3/s (17 m^3/s); minimum daily, 1.0 ft^3/s (0.028 m^3/s) Jan. 14-16, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft^3/s (11.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 2	1845	981	27.8	5.60	1.707
Oct. 8	1115	966	27.4	5.57	1.698
Oct. 13	1730	403	11.4	4.17	1.271
Oct. 18	2330	425	12.0	4.24	1.292
Oct. 22	0245	*986	27.9	*5.61	1.710
Oct. 30	2330	961	27.2	5.56	1.695
Nov. 15	0500	661	18.7	4.89	1.490
Dec. 13	0630	461	13.1	4.35	1.326
Mar. 4	1430	594	16.8	4.72	1.439
Mar. 6	1430	669	18.9	4.91	1.497

Minimum daily discharge, 1.3 ft^3/s (0.037 m^3/s) Aug. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	282	17	6.4	8.8	6.9	7.2	45	27	17	13	37
2	324	80	54	6.2	11	30	6.9	57	37	12	8.7	19
3	103	64	46	6.1	14	141	6.9	66	24	12	7.1	23
4	49	46	25	6.0	109	389	6.9	78	70	11	5.5	23
5	41	176	21	6.0	47	180	24	99	98	8.5	4.9	13
6	55	164	20	5.9	54	277	19	88	30	8.1	4.8	12
7	48	41	19	5.8	23	92	30	83	19	8.5	4.3	9.6
8	283	28	144	5.9	17	30	21	81	16	11	4.0	6.9
9	111	21	117	6.0	13	21	15	80	20	17	3.8	23
10	85	22	33	6.2	11	20	16	80	18	11	3.5	24
11	51	26	22	6.4	11	68	14	26	15	11	3.3	12
12	45	21	114	6.7	8.8	46	12	17	12	8.5	3.3	120
13	181	16	199	7.0	7.9	33	12	16	12	11	3.0	87
14	97	33	47	8.8	7.2	83	15	15	11	9.7	2.8	32
15	47	273	33	9.6	6.9	53	12	13	22	7.3	2.6	70
16	36	39	27	12	6.6	33	11	12	17	6.9	2.4	44
17	82	19	18	50	6.4	25	10	15	12	6.2	2.4	38
18	197	14	14	103	6.1	58	10	13	11	6.2	2.4	42
19	156	11	36	29	6.0	32	12	13	10	5.9	2.3	19
20	64	10	42	16	5.8	27	12	12	9.3	6.9	1.8	14
21	55	10	40	12	5.9	24	12	12	9.3	7.7	2.0	11
22	373	9.9	37	52	5.9	21	14	28	14	7.7	1.7	9.2
23	113	13	48	190	5.8	23	19	136	13	7.7	1.8	7.8
24	65	58	28	26	5.9	21	20	39	9.7	6.2	1.5	25
25	74	48	18	17	6.0	17	19	150	8.1	5.0	1.5	37
26	39	56	15	34	6.1	14	17	110	7.3	4.4	1.5	55
27	31	178	12	16	6.2	12	21	34	6.9	3.8	1.4	124
28	32	39	11	15	6.4	10	24	24	6.6	3.7	1.3	35
29	22	25	10	12	---	8.8	30	18	58	3.5	1.3	21
30	216	22	8.1	10	---	8.2	36	15	46	5.3	1.3	103
31	319	---	6.8	9.0	---	7.3	---	18	---	33	24	---
TOTAL	3443	1844.9	1281.9	702.0	428.7	1811.2	484.9	1493	669.2	283.7	125.2	1096.5
MEAN	111	61.5	41.4	22.6	15.3	58.4	16.2	48.2	22.3	9.15	4.04	36.6
MAX	373	282	199	190	109	389	36	150	98	33	24	124
MIN	22	9.9	6.8	5.8	5.8	6.9	6.9	12	6.6	3.5	1.3	6.9
CFSM	21.0	11.6	7.83	4.27	2.89	11.0	3.06	9.11	4.22	1.73	.76	6.92
IN.	24.21	12.97	9.01	4.94	3.01	12.73	3.41	10.50	4.71	1.99	.88	7.71
AC-FT	6830	3660	2540	1390	850	3590	962	2960	1330	563	248	2170

CAL YR 1978 TOTAL 13594.5 MEAN 37.2 MAX 373 MIN 2.4 CFSM 7.03 IN 95.58 AC-FT 26960
WTR YR 1979 TOTAL 13664.2 MEAN 37.4 MAX 389 MIN 1.3 CFSM 7.07 IN 96.07 AC-FT 27100

15059500 WHIPPLE CREEK NEAR WARD COVE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968-72 and 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT						
25...	1500	49	42	6.5	107	14
NOV						
01...	1535	815	--	--	593	1310
01...	1540	815	--	--	503	1110
01...	1620	745	--	--	370	744

15067900 UPPER MAHONEY LAKE OUTLET NEAR KETCHIKAN

LOCATION.--Lat 55°24'50", long 131°33'16", in SE¼NE¼ sec.34, T.74 S., R.91 E., Gateway Borough, Hydrologic Unit 19010000, on Revillagigedo Island, in Tongass National Forest, on right bank 300 ft (100 m) upstream from lake outlet and 6 mi (10 km) northeast of Ketchikan.

DRAINAGE AREA.--2.03 mi² (5.26 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,950 ft (600 m), from topographic map.

REMARKS.--Records fair except those for Nov. 16 to Mar. 23, which are poor. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 480 ft³/s (13.6 m³/s) Oct. 31, 1978, gage height, 6.93 ft (2.112 m), from rating curve extended above 75 ft³/s (2.1 m³/s); minimum daily, 1.3 ft³/s (0.037 m³/s) Jan. 9, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 480 ft³/s (13.6 m³/s) Oct. 31, gage height, 6.93 ft (2.112 m), from rating curve extended above 75 ft³/s (2.1 m³/s); minimum daily, 1.3 ft³/s (0.037 m³/s) Jan. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	161	5.1	2.1	2.0	5.2	3.6	41	63	61	74	85
2	228	82	6.5	1.9	2.0	5.7	3.4	57	95	60	38	54
3	135	34	3.2	1.8	2.4	6.4	3.4	143	64	69	28	95
4	38	19	6.4	1.7	2.7	7.3	3.3	114	158	53	22	92
5	25	111	4.9	1.6	5.1	8.6	5.2	68	169	67	9.1	41
6	22	217	5.0	1.5	5.0	10	6.1	42	65	45	18	51
7	44	43	4.7	1.4	4.6	13	7.5	37	39	44	18	37
8	129	19	5.2	1.4	4.2	15	6.1	33	36	43	16	27
9	83	13	7.1	1.3	3.9	16	4.9	26	90	75	14	79
10	74	9.0	2.7	1.4	3.6	14	4.5	41	66	68	13	68
11	46	9.0	5.1	1.4	3.3	13	4.9	42	42	58	11	32
12	38	8.6	5.0	1.5	3.0	12	5.8	30	36	45	10	85
13	183	6.6	6.5	1.6	2.8	11	6.1	25	33	40	10	95
14	83	6.9	5.5	2.0	2.7	10	6.0	24	40	37	9.8	67
15	31	29	5.0	2.2	2.7	9.8	5.4	22	90	34	9.3	67
16	18	24	5.0	2.4	2.7	9.2	5.4	22	66	29	8.9	101
17	39	5.0	4.6	2.5	2.7	8.7	6.1	41	43	34	8.5	83
18	152	4.8	4.4	2.5	2.8	8.3	7.1	42	46	42	8.2	69
19	108	4.6	4.1	2.5	2.9	8.1	8.2	32	45	39	7.9	25
20	37	4.6	3.9	2.8	3.0	7.9	8.9	28	40	72	7.6	19
21	54	4.8	3.7	3.8	3.1	7.8	9.9	22	52	118	7.4	15
22	388	5.0	3.6	4.5	3.3	7.8	12	38	83	70	7.1	13
23	135	5.4	3.5	4.9	3.5	7.8	16	68	60	41	6.9	12
24	66	5.9	3.3	4.7	3.7	7.6	18	25	45	30	6.7	22
25	91	7.4	3.1	4.1	3.9	7.2	22	30	42	28	6.6	37
26	51	10	2.9	3.6	4.2	6.7	24	80	42	27	6.4	74
27	27	23	2.8	3.0	4.5	5.8	28	60	45	25	6.2	263
28	23	9.5	2.7	2.5	4.8	5.2	36	46	40	22	6.1	66
29	17	6.4	2.5	2.3	---	4.7	42	38	82	11	6.0	40
30	147	4.9	2.4	2.1	---	4.3	39	31	76	69	11	205
31	253	---	2.3	2.0	---	3.8	---	40	---	182	44	---
TOTAL	2800	893.6	132.7	75.0	95.1	267.9	358.8	1388	1890	1538	455.7	1959
MEAN	90.3	29.8	4.28	2.42	3.40	8.64	12.0	44.8	63.0	49.6	14.7	65.3
MAX	388	217	7.1	4.9	5.1	16	42	143	169	182	74	263
MIN	17	4.6	2.3	1.3	2.0	3.8	3.3	22	33	11	6.0	12
CFSM	44.5	14.7	2.11	1.19	1.68	4.26	5.91	22.1	31.0	24.4	7.24	32.2
IN.	51.29	16.36	2.43	1.37	1.76	4.91	6.57	25.42	34.62	28.17	8.35	35.98
AC-FT	5550	1770	263	149	189	531	712	2750	3750	3050	904	3890

CAL YR 1978 TOTAL 11490.2 MEAN 31.5 MAX 388 MIN 2.3 CFSM 15.5 IN 210.46 AC-FT 22790
WTR YR 1979 TOTAL 11853.6 MEAN 32.5 MAX 388 MIN 1.3 CFSM 16.0 IN 217.11 AC-FT 23510

15067900 UPPER MAHONEY LAKE OUTLET NEAR KETCHIKAN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 and 1979.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
JUL					
25...	1530	27	11	7.4	10.0

15068000 MAHONEY CREEK NEAR KETCHIKAN

LOCATION.--Lat 55°25'34", long 131°30'40", in SW¼NE¼ sec.25, T.74 S., R.91 E., Gateway Borough, Hydrologic Unit 19060000, on Revillagigedo Island, in Tongass National Forest, on right bank 0.1 mi (0.2 km) upstream from mouth at George Inlet, 0.1 mi (0.2 km) downstream from Mahoney Lake, and 8 mi (13 km) northeast of Ketchikan.

DRAINAGE AREA.--5.70 mi² (14.8 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1920 to October 1925, September 1926 to October 1933, October 1947 to September 1958, October 1977 to current year. Monthly discharge only for some periods, published in WSP 1372. Prior to October 1947, published as "at George Inlet".

GAGE.--Water-stage recorder. Altitude of gage is 48 ft (15 m), by barometer. Prior to October 1947, at site 80 ft (24 m) downstream at different datum and October 1947 to September 1958 at site 80 ft (24 m) downstream at datum 2.68 ft (0.817 m) lower.

REMARKS.--Records poor for period of no gage-height record prior to Nov. 1, good thereafter.

AVERAGE DISCHARGE.--25 years (water years 1920-25, 1926-33, 1947-58, 1978-79), 104 ft³/s (2.945 m³/s), 247.78 in/yr (6,278 mm/yr), 75,350 acre-ft/yr (92.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,530 ft³/s (71.6 m³/s) Feb. 2, 1954, gage height, 4.66 ft (1.420 m) site and datum then in use, from rating curve extended above 1,100 ft³/s (31.2 m³/s); minimum daily, 1.5 ft³/s (0.042 m³/s) Jan. 30 to Feb. 1, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 640 ft³/s (18.1 m³/s) Oct. 31; no peak discharge recorded above base of 950 ft³/s (27 m³/s) but base may have been exceeded during period of no gage-height record; minimum daily, 15 ft³/s (0.42 m³/s) Aug. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	380	94	33	33	19	24	104	141	104	204	85
2	620	235	124	30	31	22	23	120	193	84	94	92
3	480	148	167	29	29	43	22	295	162	89	67	85
4	250	106	141	28	39	116	21	258	310	94	52	183
5	120	138	105	27	71	120	23	184	460	87	43	91
6	66	206	82	25	72	120	28	144	202	82	38	77
7	130	140	70	24	65	113	33	113	112	78	35	76
8	340	89	134	23	56	109	36	100	87	76	33	56
9	250	62	173	22	49	105	36	82	184	101	30	98
10	175	49	128	21	44	80	35	134	170	119	28	169
11	110	43	93	20	40	75	33	156	111	105	26	82
12	220	40	104	20	36	94	32	115	90	87	24	129
13	500	35	168	18	33	85	31	80	79	75	23	169
14	200	34	152	18	31	78	31	74	81	68	22	120
15	100	118	118	17	30	90	31	64	201	62	21	96
16	56	112	93	18	28	76	29	58	169	55	21	163
17	150	77	74	25	26	64	28	81	116	53	20	235
18	420	55	62	34	26	75	28	116	101	58	20	128
19	225	73	61	40	25	71	28	103	96	60	19	72
20	115	64	68	39	24	59	29	91	87	87	19	50
21	170	58	70	37	23	49	30	80	94	207	19	39
22	600	52	69	39	21	48	32	104	151	160	18	32
23	450	50	66	76	20	46	37	155	136	94	18	28
24	140	88	62	78	19	46	45	110	101	67	18	28
25	250	170	56	65	19	44	57	77	88	55	17	39
26	120	212	51	66	18	41	65	115	82	49	17	62
27	80	237	46	56	18	37	74	195	84	45	17	120
28	55	185	42	49	19	34	98	114	80	41	16	410
29	100	152	39	45	---	31	114	90	119	37	16	250
30	210	119	36	40	---	28	110	81	174	46	15	100
31	640	---	34	36	---	26	---	91	---	470	18	---
TOTAL	7426	3527	2782	1098	945	2044	1243	3684	4261	2895	1028	3364
MEAN	240	118	89.7	35.4	33.8	65.9	41.4	119	142	93.4	33.2	112
MAX	640	380	173	78	72	120	114	295	460	470	204	410
MIN	55	34	34	17	18	19	21	58	79	37	15	28
CFSM	42.1	20.7	15.7	6.21	5.93	11.6	7.26	20.9	24.9	16.4	5.83	19.6
IN.	48.46	23.01	18.15	7.16	6.17	13.34	8.11	24.04	27.80	18.89	6.71	21.95
AC-FT	14730	7000	5520	2180	1870	4050	2470	7310	8450	5740	2040	6670

CAL YR 1978 TOTAL 31039.2 MEAN 85.0 MAX 640 MIN 7.8 CFSM 14.9 IN 202.54 AC-FT 61570
WTR YR 1979 TOTAL 34297.0 MEAN 94.0 MAX 640 MIN 15 CFSM 16.5 IN 223.79 AC-FT 68030

15068000 MAHONEY CREEK NEAR KETCHIKAN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1949 and 1978-79.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
JUL				
25...	1740	56	7	15.5

15072000 FISH CREEK NEAR KETCHIKAN

LOCATION.--Lat 55°23'30", long 131°11'40", Gateway Borough, Hydrologic Unit 1906000, on Revillagigedo Island, in Tongass National Forest, on right bank 100 ft (30 m) upstream from outlet of Low Lake, 750 ft (230 m) upstream from mouth at Thorne Arm, and 18 mi (29 km) east of Ketchikan.

DRAINAGE AREA.--32.1 mi^2 (83.1 km^2), excludes that of Granite Lake drainage basin.

PERIOD OF RECORD.--May 1915 to October 1936, October 1938 to current year. Prior to October 1945, monthly discharge only. Prior to January 1921, published as "near Sea Level, Revillagigedo Island."

REVISED RECORDS.--WSP 1372: 1918.

GAGE.--Water-stage recorder. Altitude of gage is 20 ft (6.1 m) by barometer. Prior to October 1935, at site 50 ft (15 m) downstream at different datum. October 1935 to Oct. 3, 1975, at prior site and present datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--61 years, 422 ft^3/s (11.95 m^3/s), 178.53 in/yr (4,535 mm/yr), 305,700 acre-ft/yr (377 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,400 ft^3/s (153 m^3/s) Oct. 15, 1961, gage height, 8.85 ft (2.697 m), site then in use, from rating curve extended above 3,600 ft^3/s (102 m^3/s); minimum daily, 20 ft^3/s (0.57 m^3/s) Sept. 9, 10, 1928.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,640 ft^3/s (103 m^3/s) Nov. 1 (2200 hrs), gage height, 4.44 ft (1.353 m), only peak above base of 2,200 ft^3/s (62 m^3/s); minimum daily, 27 ft^3/s (0.76 m^3/s) Aug. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	600	2920	386	85	90	113	148	558	481	432	238	73
2	657	2740	348	83	83	138	135	539	672	375	298	200
3	1080	1610	506	76	83	196	129	558	717	338	289	313
4	975	1030	539	71	142	489	125	635	732	303	242	328
5	643	847	415	66	229	1000	166	672	1000	274	208	293
6	506	1630	327	60	264	1580	242	628	1000	251	184	279
7	432	1390	264	60	260	2020	303	572	740	238	177	256
8	500	825	283	54	233	1380	303	558	552	225	162	229
9	621	532	364	51	200	820	278	526	481	217	148	229
10	764	375	370	49	177	565	255	539	468	208	128	298
11	779	307	312	47	155	475	233	642	438	217	113	359
12	643	255	347	47	135	506	225	600	386	217	104	468
13	1110	212	829	45	116	475	216	506	343	204	93	679
14	1720	204	975	45	116	420	220	468	323	200	83	709
15	1070	392	709	45	129	444	225	403	487	196	76	532
16	665	420	500	54	125	426	216	354	586	180	71	450
17	513	381	359	58	116	364	208	364	512	169	64	600
18	1050	298	278	107	125	354	204	487	444	162	62	748
19	1770	233	246	122	129	333	204	519	397	155	58	586
20	1170	192	260	116	119	303	208	512	359	155	51	409
21	740	159	260	113	113	283	216	487	328	192	47	308
22	993	138	242	132	107	269	233	450	308	323	46	242
23	1350	129	220	229	102	269	269	642	308	392	42	200
24	1050	192	208	238	96	269	312	854	308	354	40	204
25	993	392	181	220	96	273	359	1120	298	289	37	313
26	1030	532	170	216	93	269	386	1630	284	242	35	444
27	764	906	148	184	105	246	409	1320	279	196	34	709
28	586	1150	129	159	116	216	475	880	274	169	30	880
29	462	788	113	138	---	192	539	614	274	144	29	709
30	537	539	99	116	---	173	558	487	397	131	27	586
31	2620	---	90	102	---	159	---	432	---	148	32	---
TOTAL	28393	21718	10477	3188	3854	15019	7999	19556	14176	7296	3248	12633
MEAN	916	724	338	103	138	484	267	631	473	235	105	421
MAX	2620	2920	975	238	264	2020	558	1630	1000	432	298	880
MIN	432	129	90	45	83	113	125	354	274	131	27	73
CFSM	28.5	22.6	10.5	3.21	4.30	15.1	8.32	19.7	14.7	7.32	3.27	13.1
IN.	32.90	25.17	12.14	3.69	4.47	17.40	9.27	22.66	16.43	8.45	3.76	14.64
AC-FT	56320	43080	20780	6320	7640	29790	15870	38790	28120	14470	6440	25060

CAL YR 1978 TOTAL 129349 MEAN 354 MAX 2920 MIN 28 CFSM 11.0 IN 149.90 AC-FT 256600
WTR YR 1979 TOTAL 147557 MEAN 404 MAX 2920 MIN 27 CFSM 12.6 IN 171.00 AC-FT 292700

15081500 STANEY CREEK NEAR CRAIG

LOCATION.--lat 55°48'57", long 133°07'58", Hydrologic Unit 19060000, in Tongass National Forest, on Prince of Wales Island, on left bank 1.3 mi (2.1 km) upstream from mouth at Tuxekan Passage and 23 mi (37 km) north of Craig.

DRAINAGE AREA.--51.6 mi² (133.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to current year. Published as Lester River near Craig, October 1964 to September 1966.

REVISED RECORDS.--WSP 2136: 1965 (M).

GAGE.--Water-stage recorder. Altitude of gage is 2 ft (0.6 m), from topographic map.

REMARKS.--Water-discharge records good except those for Dec. 25 to Mar. 24, which are poor.

AVERAGE DISCHARGE.--15 years, 364 ft³/s (10.31 m³/s), 95.80 in/yr (2,433 mm/yr), 263,700 acre-ft/yr (325 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,600 ft³/s (442 m³/s) Oct. 18, 1964, gage height, 13.1 ft (3.99 m) from floodmarks, from rating curve extended above 3,000 ft³/s (85 m³/s); minimum daily, 8.7 ft³/s (0.24 m³/s) Aug. 22-25, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,000 ft³/s (200 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 13	1500	8,760	248	10.35	3.155	Nov. 5	1800	9,450	268	10.74	3.274
Oct. 31	0130	*13,200	374	*12.66	3.859						

Minimum daily discharge, 21 ft³/s (0.59 m³/s) Aug. 26-27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	222	3350	144	117	492	165	90	226	285	73	304	114
2	2670	2730	977	111	676	430	95	226	265	55	414	127
3	2360	982	756	103	1250	800	92	324	176	55	402	111
4	333	629	328	117	2570	950	100	294	193	51	156	90
5	193	3550	226	126	1560	1200	425	226	844	40	95	197
6	520	2910	219	141	330	850	374	226	504	36	68	117
7	245	547	211	173	250	540	332	290	156	43	109	55
8	1290	391	1040	219	190	370	342	183	120	53	71	66
9	1350	238	995	265	135	190	253	126	312	73	73	90
10	1340	156	545	257	115	620	290	339	183	55	64	135
11	894	267	204	302	90	560	215	576	138	75	55	65
12	667	190	1140	328	78	400	186	208	98	49	59	71
13	4400	132	2990	333	70	330	183	183	82	49	55	83
14	859	209	1370	378	65	720	190	163	82	80	31	100
15	392	2300	467	342	62	450	163	123	261	71	43	118
16	257	412	208	407	60	320	147	111	117	75	38	66
17	516	166	211	1490	59	250	138	235	90	53	41	88
18	2510	126	166	1030	58	350	144	310	78	57	45	125
19	1060	111	450	954	57	540	150	412	75	57	45	100
20	594	114	1420	659	56	740	150	245	64	82	38	85
21	378	120	375	525	55	660	160	166	68	845	22	74
22	2550	129	208	679	54	450	230	339	85	571	28	65
23	2080	339	315	1720	55	360	286	593	82	197	28	76
24	1100	1050	80	964	56	270	320	366	66	98	45	94
25	3600	701	166	932	57	234	281	810	57	82	28	125
26	813	525	135	2300	60	176	241	492	62	73	21	170
27	700	2020	120	1040	70	138	311	197	51	45	21	280
28	388	835	123	988	100	138	426	123	45	53	22	480
29	211	311	117	693	---	123	378	111	66	43	28	390
30	6780	238	103	502	---	109	273	100	109	36	26	460
31	6650	---	92	447	---	95	---	114	---	108	45	---
TOTAL	47922	25778	15901	18642	8730	13528	6965	8437	4814	3333	2520	4217
MEAN	1546	859	513	601	312	436	232	272	160	108	81.3	141
MAX	6780	3550	2990	2300	2570	1200	426	810	844	845	414	480
MIN	193	111	80	103	54	95	90	100	45	36	21	55
CFSM	30.0	16.6	9.94	11.6	6.05	8.45	4.50	5.27	3.10	2.09	1.58	2.73
IN.	34.55	18.58	11.46	13.44	6.29	9.75	5.02	6.08	3.47	2.40	1.82	3.04
AC-FT	95050	51130	31540	36980	17320	26830	13820	16730	9550	6610	5000	8360

CAL YR 1978 TOTAL 137718 MEAN 377 MAX 6780 MIN 20 CFSM 7.31 IN 99.28 AC-FT 273200
WTR YR 1979 TOTAL 160787 MEAN 441 MAX 6780 MIN 21 CFSM 8.55 IN 115.91 AC-FT 318900

NOTE.--No gage-height record Feb. 26 to Mar. 24.

15081500 STANEY CREEK NEAR CRAIG--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: April 1966 to October 1973, February 1974 to March 1976, October 1976 to September 1977, and April 1978 to February 1979.

INSTRUMENTATION.--Temperature recorder since Apr. 18, 1966.

REMARKS.--Records fair except for interruptions in the record which were due to malfunctions of the equipment.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 22.5°C June 18, 1969; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded for period October through February, 9.5°C Oct. 10; minimum recorded, 0.0°C on many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
MAY 08...	1500	169	43	--	8.0
JUL 27...	1200	41	70	6.8	16.5

TEMPERATURE, WATER (DEG. C), OCTOBER 1978 TO FEBRUARY 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	9.0	8.0	---	---	1.5	.0	1.5	.0	.0	.0		
2	8.5	7.0	---	---	3.5	1.5	.0	.0	.0	.0		
3	8.0	7.5	5.0	4.5	3.5	1.5	.0	.0	.0	.0		
4	7.5	7.0	4.5	.0	1.5	1.0	.0	.0	.0	.0		
5	8.5	7.5	5.0	4.0	2.0	1.0	.0	.0	.0	.0		
6	8.5	.0	5.5	5.0	2.0	2.0	.0	.0	.0	.0		
7	9.0	8.0	4.5	.0	2.5	2.0	.0	.0	---	---		
8	8.0	7.0	3.5	3.0	3.0	2.5	.0	.0	---	---		
9	8.5	8.0	3.0	1.5	3.5	2.5	.5	.0	---	---		
10	9.5	8.5	1.5	.5	2.5	.0	1.0	.0	---	---		
11	9.0	7.5	2.5	1.0	1.0	.0	1.0	.0	---	---		
12	7.5	6.5	2.0	1.0	1.5	.0	.5	.0	---	---		
13	7.0	6.5	2.0	1.0	2.0	1.5	.5	.0	---	---		
14	8.0	7.0	2.5	2.0	2.0	1.0	.5	.0	---	---		
15	8.0	.0	3.0	2.0	1.0	.0	1.5	.0	---	---		
16	6.5	6.5	2.5	.0	.0	---	2.0	.0	---	---		
17	7.0	6.5	.5	---	.0	---	.5	.5	---	---		
18	7.0	6.0	.0	---	.0	.0	.5	.0	---	---		
19	6.0	4.0	.0	.0	.0	.0	.5	.0	---	---		
20	6.0	5.0	.0	.0	.5	.0	.0	.0	---	---		
21	5.5	4.5	.0	.0	.5	.0	.0	.0	---	---		
22	7.5	5.5	.0	.0	.5	---	.0	---	---	---		
23	7.5	6.5	.0	---	.5	.0	.0	.0	---	---		
24	7.5	6.0	1.5	.0	.5	.0	.0	---	---	---		
25	6.5	5.0	2.5	1.5	.0	.0	.0	.0	---	---		
26	5.5	5.0	3.5	2.5	.0	---	.0	---	---	---		
27	---	---	3.5	3.0	.0	.0	.0	.0	---	---		
28	---	---	3.5	3.0	.0	.0	.0	---	---	---		
29	---	---	3.0	3.0	1.5	---	.0	---	---	---		
30	---	---	3.0	1.5	2.5	.0	.0	.0	---	---		
31	---	---	---	---	2.5	.0	.0	.0	---	---		
MONTH	9.5	.0	5.5	.0	3.5	.0	2.0	.0		.0		

15083500 PERKINS CREEK NEAR METLAKATLA

LOCATION.--Lat 54°56'48", long 132°10'15", in NW¼SW¼ sec.9, T.80 S., R.88 E., Hydrologic Unit 19060000, on Prince of Wales Island, in Tongass National Forest, on right bank 1,000 ft (305 m) upstream from mouth at South Arm of Moria Sound, 27 mi (43 km) southwest of Metlakatla, and 35 mi (56 km) southwest of Ketchikan.

DRAINAGE AREA.--3.38 mi² (8.75 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 18 ft (5.5 m), from topographic map.

REMARKS.--Water-discharge records good. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 860 ft³/s (24.4 m³/s) Sept. 13, 1976, gage height, 4.76 ft (1.451 m), from rating curve extended above 80 ft³/s (2.3 m³/s); minimum daily, 1.2 ft³/s (0.034 m³/s) Aug 27, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 460 ft³/s (13.0 m³/s) Mar. 4, gage height, 3.70 ft (1.128 m); minimum daily, 1.2 ft³/s (0.034 m³/s) Aug. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	203	21	4.5	8.7	10	8.0	13	24	9.8	14	82
2	200	53	132	4.4	26	32	8.4	18	22	6.1	8.0	42
3	95	76	39	4.2	25	164	16	69	13	11	6.1	57
4	35	49	24	4.1	226	280	15	64	95	12	4.3	98
5	27	206	18	4.0	53	192	72	28	56	6.1	5.6	98
6	33	35	14	3.9	46	230	19	14	15	4.5	4.5	82
7	31	27	29	4.0	18	81	119	11	9.1	4.1	3.4	19
8	170	18	106	4.1	15	31	30	9.1	9.2	4.8	2.8	26
9	49	14	62	4.2	12	30	24	9.6	42	39	2.6	22
10	60	11	29	4.3	10	27	26	109	15	13	2.5	20
11	27	93	16	4.4	8.5	93	19	24	10	9.4	2.1	40
12	72	24	78	4.8	7.3	75	16	13	7.0	6.7	2.0	155
13	213	14	141	5.4	6.4	44	15	13	6.4	6.4	2.0	78
14	34	77	48	7.4	6.4	84	13	12	16	4.9	1.8	25
15	19	257	40	27	6.6	37	12	7.7	42	3.8	1.7	47
16	14	30	23	114	6.7	25	12	7.4	11	3.2	1.7	39
17	73	18	14	78	6.6	90	12	19	6.7	2.6	1.7	32
18	142	11	14	129	5.8	63	11	13	5.3	2.6	1.7	27
19	41	8.0	99	33	5.1	44	13	9.1	5.0	2.3	1.7	13
20	21	6.6	86	20	4.6	35	12	10	4.8	3.0	1.7	11
21	79	6.5	55	15	4.2	27	12	11	5.0	17	1.7	8.4
22	174	6.7	32	106	4.0	23	14	38	21	13	1.6	7.4
23	67	9.0	55	71	3.9	27	16	48	10	7.0	1.4	7.0
24	56	36	22	16	3.8	23	16	29	6.4	4.3	1.4	45
25	78	32	15	76	3.9	17	18	171	5.0	3.0	1.4	21
26	29	253	13	40	4.0	14	15	27	4.5	2.6	1.3	35
27	34	108	8.0	15	4.2	10	18	11	3.4	2.3	1.2	79
28	70	74	6.8	12	4.6	10	18	8.7	3.2	2.1	1.4	25
29	27	41	6.0	35	---	9.9	15	7.4	30	2.1	1.4	121
30	169	37	5.4	14	---	8.4	13	7.0	12	13	1.4	114
31	187	---	4.7	9.4	---	7.7	---	11	---	37	12	---
TOTAL	2396	1833.8	1255.9	874.1	536.3	1843.9	627.4	842.0	515.0	258.6	98.1	1476.8
MEAN	77.3	61.1	40.5	28.2	19.2	59.5	20.9	27.2	17.2	8.34	3.16	49.2
MAX	213	257	141	129	226	280	119	171	95	39	14	155
MIN	14	6.5	4.7	3.9	3.8	7.7	8.0	7.0	3.2	2.1	1.2	7.0
CFSM	22.9	18.1	12.0	8.34	5.68	17.6	6.18	8.05	5.09	2.47	.94	14.6
IN.	26.36	20.18	13.82	9.62	5.90	20.29	6.90	9.26	5.67	2.85	1.08	16.25
AC-FT	4750	3640	2490	1730	1060	3660	1240	1670	1020	513	195	2930

CAL YR 1978 TOTAL 12476.6 MEAN 34.2 MAX 270 MIN 1.6 CFSM 10.1 IN 137.28 AC-FT 24750
WTR YR 1979 TOTAL 12557.9 MEAN 34.4 MAX 280 MIN 1.2 CFSM 10.2 IN 138.17 AC-FT 24910

15083500 PERKINS CREEK NEAR METLAKATLA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1976 to current year.

INSTRUMENTATION.--Temperature recorder since Aug. 6, 1976.

REMARKS.--Records fair except for missing periods prior to Nov. 6 and after Aug. 29.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 18.0°C Aug. 14, 15, and 20, 1977; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 16.5°C July 18 and Aug. 25; minimum, 0.0°C on many days during winter peiod.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
NOV 06...	1300	70	34	--	6.5	--	--	--	--
MAR 22...	1100	22	40	6.9	2.0	11.4	5	1	1.3
MAY 07...	1500	9.7	26	6.7	7.5	10.6	4	--	1.1
JUL 26...	1000	2.6	30	6.5	13.0	10.4	7	7	2.0

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
NOV 06...	--	--	--	--	--	--	--	--	--
MAR 22...	.4	3.0	.3	5	6.5	4.8	.1	2.8	22
MAY 07...	.3	2.9	.3	--	1.5	3.5	.2	2.3	--
JUL 26...	.5	3.5	1.2	--	2.4	4.5	.2	4.1	18

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
NOV 06...	--	--	--	--	--	--	1	.19
MAR 22...	.11	.00	.18	.18	.29	.020	3	.18
MAY 07...	.00	.01	.20	.21	.21	.020	--	--
JUL 26...	.00	.14	.00	.05	.05	.010	--	--

15083500 PERKINS CREEK NEAR METLAKATLA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			---	---	4.0	3.0	.5	.5	1.5	1.0	.0	.0
2			---	---	6.0	3.5	1.0	.0	1.5	1.5	.0	.0
3			---	---	5.5	4.0	1.0	.5	2.0	1.5	.0	.0
4			---	---	4.0	3.0	1.0	.5	2.0	1.0	.5	.0
5			---	---	3.5	3.0	1.0	1.0	2.0	1.0	1.0	.5
6			7.0	6.0	3.5	3.0	1.0	.5	2.0	1.5	1.0	1.0
7			6.5	5.5	4.5	3.5	1.0	.5	1.5	1.0	1.5	1.0
8			5.5	4.5	5.5	4.5	1.0	1.0	1.5	1.0	2.0	1.0
9			4.0	3.0	5.5	4.0	1.0	.0	1.0	1.0	2.0	---
10			3.5	3.0	4.0	3.0	1.0	1.0	1.0	.5	2.0	1.5
11			4.0	3.5	3.5	3.0	1.0	1.0	.5	.5	2.0	1.0
12			4.0	3.0	3.5	2.5	1.0	.0	.5	.5	2.0	1.5
13			3.5	3.0	4.5	4.0	1.0	.0	.5	.5	2.5	1.0
14			5.0	3.5	4.0	---	1.0	.0	.5	.5	2.5	2.0
15			5.5	5.0	3.0	2.5	1.0	.5	.5	.0	2.0	1.5
16			5.0	3.0	2.5	2.0	.5	.5	.5	.5	2.5	1.5
17			3.5	2.0	2.0	1.0	.5	.5	.5	.5	2.5	1.5
18			2.0	1.0	2.0	1.0	.5	.5	.5	.5	2.5	1.5
19			1.5	1.0	2.5	1.5	.5	.5	.5	.5	3.0	2.0
20			1.5	.5	2.5	2.5	.5	.5	.5	.5	3.5	2.5
21			1.5	1.0	2.5	2.0	1.0	.5	.5	.5	3.0	---
22			2.0	1.5	2.5	2.0	1.0	.5	.5	.5	3.5	2.0
23			2.5	1.5	2.5	2.5	1.5	1.0	.5	.5	3.5	2.0
24			4.0	2.5	2.5	2.0	1.0	1.0	.5	.5	3.5	2.5
25			5.0	4.0	2.0	1.5	1.0	1.0	.5	.5	3.5	2.0
26			6.0	5.0	2.0	1.5	1.5	1.0	.5	.5	3.0	2.0
27			6.5	6.0	1.0	1.0	1.5	1.0	.5	.0	3.0	2.0
28			6.0	5.0	1.5	1.0	1.5	1.0	.0	.0	3.5	2.5
29			5.5	5.0	1.0	.0	1.0	.0	---	---	3.5	2.0
30			5.0	4.0	1.0	.0	1.0	1.0	---	---	3.0	2.0
31			---	---	1.5	.5	1.0	.5	---	---	3.0	2.0
MONTH			7.0	.5	6.0	.0	1.5	.0	2.0	.0	3.5	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.0	2.5	9.5	8.5	10.0	10.0	11.0	10.0	13.5	13.0		
2	3.0	2.5	9.0	8.0	11.5	9.5	11.0	10.0	14.0	13.0		
3	3.5	2.5	7.5	7.0	11.0	10.0	11.0	10.5	14.5	13.0		
4	3.5	2.0	7.5	7.0	10.0	9.0	13.0	10.0	14.5	12.5		
5	3.5	3.0	9.0	6.0	9.0	8.0	14.0	11.0	14.5	11.0		
6	4.0	2.5	9.0	8.0	10.0	---	14.0	12.5	14.0	13.5		
7	3.5	2.0	9.0	7.5	10.0	9.0	14.0	12.5	14.0	12.5		
8	4.0	2.5	9.0	7.5	9.5	9.0	14.0	12.5	14.0	12.5		
9	4.5	3.5	8.0	6.5	10.5	8.0	13.5	13.0	14.5	11.5		
10	5.0	3.5	6.5	5.5	10.0	9.0	13.0	12.5	14.5	11.5		
11	5.0	3.0	7.0	6.0	11.0	8.0	13.5	12.5	14.5	12.0		
12	5.0	4.0	7.5	6.5	10.5	9.5	13.5	12.5	15.0	12.0		
13	5.0	4.5	8.0	7.0	11.5	9.5	13.0	12.0	15.5	13.0		
14	5.0	4.5	8.5	6.0	10.5	10.0	13.5	12.0	15.5	15.0		
15	4.5	3.5	8.5	7.0	10.0	9.0	14.0	12.5	15.0	14.0		
16	5.0	3.0	8.5	7.0	---	8.5	15.0	12.5	14.0	13.5		
17	5.5	3.5	9.0	7.5	12.0	10.0	14.5	13.5	14.5	13.5		
18	6.0	4.0	9.0	8.0	12.0	11.0	16.5	13.5	15.0	13.5		
19	6.0	4.5	9.0	---	11.5	10.5	15.5	14.0	15.0	13.5		
20	6.5	4.5	9.0	8.0	12.0	10.0	15.0	14.0	15.5	13.0		
21	6.5	4.5	9.5	7.5	11.5	10.5	14.0	13.0	15.5	13.5		
22	7.5	4.0	9.0	8.5	11.0	10.5	13.0	12.5	15.5	13.5		
23	7.5	5.5	9.5	8.0	11.0	10.5	14.0	12.5	16.0	14.5		
24	8.0	5.5	9.5	8.5	12.5	10.0	15.0	11.0	16.0	13.5		
25	8.0	1.0	8.5	8.0	13.5	10.0	16.0	13.0	16.5	14.5		
26	8.5	6.5	9.0	7.5	14.5	11.0	16.0	12.5	16.0	14.0		
27	9.0	6.5	9.0	7.5	13.0	11.5	15.5	13.5	15.5	13.5		
28	9.5	7.0	9.0	8.5	12.0	10.5	14.5	13.5	14.5	13.5		
29	9.5	7.5	9.5	8.5	12.0	11.0	14.5	13.0	14.5	13.5		
30	9.5	3.0	9.0	8.5	11.0	10.0	14.0	13.5	---	---		
31	---	---	10.5	9.0	---	---	14.0	12.0	---	---		
MONTH	9.5	1.0	10.5	5.5	14.5	8.0	16.5	10.0	16.5	11.0		
YEAR	16.5	.0										

15085100 OLD TOM CREEK NEAR KASAAN

LOCATION.--Lat 55°23'44", long 132°24'25", in SW¼NW¼ sec.6, T.75 S., R.86 E., Hydrologic Unit 19060000, on Prince of Wales Island, in Tongass National Forest, on left bank 1,000 ft (300 m) upstream from mouth at Skowl Arm of Kasaan Bay, 0.4 mi (0.6 km) downstream from unnamed tributary, and 10 mi (16 km) south of Kasaan.

DRAINAGE AREA.--5.90 mi² (15.28 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1949 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 10 ft (3 m), from topographic map.

REMARKS.--Water-discharge records good except those for Jan. 19 to Mar. 24, which are poor.

AVERAGE DISCHARGE.--30 years, 38.1 ft³/s (1.079 m³/s), 87.69 in/yr (2,227 mm/yr), 27,600 acre-ft/year (34.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge (corrected), 1,030 ft³/s (29.2 m³/s) Oct. 21, 1977, gage height, 5.98 ft (1.817 m), from rating curve extended above 140 ft³/s (4.0 m³/s); minimum recorded, 0.16 ft³/s (0.005 m³/ Nov. 15, 1965, gage height, 1.10 ft (0.335 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft³/s (12.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 2	1600	641	18.2	4.98	1.518	Nov. 1	1345	*949	26.9	*5.78	1.762
Oct. 22	0145	641	18.2	4.98	1.518						

Minimum daily discharge, 3.5 ft³/s (0.099 m³/s) Aug. 29, 30.

CORRECTIONS.--The statement for maximum discharge for period of record published last year was wrong and should have been the same as that shown this year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	373	36	8.1	11	8.4	18	37	22	13	11	12
2	299	147	51	7.6	13	15	17	38	22	11	10	15
3	178	142	54	7.2	42	60	17	68	20	9.7	11	25
4	55	155	40	7.0	102	100	17	64	27	9.6	8.7	45
5	37	190	32	6.9	70	150	26	45	39	9.0	7.3	26
6	36	101	29	6.8	56	115	28	37	26	8.2	6.8	22
7	29	63	28	6.8	42	80	51	34	20	7.8	6.4	18
8	169	47	99	6.7	27	40	50	30	18	7.8	6.1	17
9	112	29	101	6.8	17	23	36	24	23	12	5.9	38
10	93	24	52	6.9	13	22	33	100	21	13	6.0	28
11	69	35	37	7.1	11	75	30	51	19	11	5.6	20
12	58	31	91	7.8	10	45	30	34	16	9.5	5.5	39
13	181	24	210	8.8	9.5	37	28	30	14	8.7	5.5	38
14	86	52	93	10	8.3	90	27	26	14	7.8	5.3	40
15	44	98	59	12	7.8	55	25	22	17	7.3	5.2	25
16	32	41	42	15	7.5	35	22	20	15	6.8	4.7	12
17	35	28	32	20	7.1	29	22	25	12	6.2	4.7	20
18	90	29	28	36	7.0	43	23	23	12	6.2	4.7	29
19	69	26	36	53	6.9	68	23	21	11	5.9	4.7	17
20	44	23	79	22	6.8	90	24	23	10	6.2	4.5	14
21	61	22	48	16	6.7	66	26	21	10	7.3	4.4	13
22	224	21	39	45	6.6	47	32	47	10	8.7	4.1	12
23	104	22	40	94	6.5	47	38	55	10	7.8	4.0	13
24	66	48	43	35	6.4	43	42	43	9.7	6.8	4.2	14
25	108	42	26	19	6.6	36	42	73	9.0	5.9	4.2	18
26	64	52	19	32	6.8	30	39	48	8.6	5.6	4.2	28
27	44	126	15	27	7.1	26	42	31	7.9	5.3	4.0	40
28	36	63	13	24	7.6	24	47	25	7.7	5.3	3.9	54
29	31	50	12	18	---	22	44	22	10	5.0	3.5	47
30	193	47	10	15	---	20	39	20	13	7.0	3.5	53
31	300	---	8.8	12	---	19	---	20	---	14	5.0	---
TOTAL	2983	2151	1502.8	599.5	529.2	1560.4	938	1157	473.9	255.4	174.6	792
MEAN	96.2	71.7	48.5	19.3	18.9	50.3	31.3	37.3	15.8	8.24	5.63	26.4
MAX	300	373	210	94	102	150	51	100	39	14	11	54
MIN	29	21	8.8	6.7	6.4	8.4	17	20	7.7	5.0	3.5	12
CFSM	16.3	12.2	8.22	3.27	3.20	8.53	5.31	6.32	2.68	1.40	.95	4.48
IN.	18.80	13.56	9.47	3.78	3.34	9.84	5.91	7.29	2.99	1.61	1.10	4.99
AC-FT	5920	4270	2980	1190	1050	3100	1860	2290	940	507	346	1570

CAL YR 1978 TOTAL 13237.9 MEAN 36.3 MAX 373 MIN 2.0 CFSM 6.15 IN 83.45 AC-FT 26260
WTR YR 1979 TOTAL 13116.8 MEAN 35.9 MAX 373 MIN 3.5 CFSM 6.09 IN 82.69 AC-FT 26020

15085100 OLD TOM CREEK NEAR KASAAN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956, 1959, and 1965 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1964, April 1965 to February 1975, June 1975 to April 1978, and November 1978 to September 1979.

INSTRUMENTATION.--Temperature recorder since October 1964.

REMARKS.--Records fair except for missing periods Oct. 1 to Nov. 2, Dec. 19 to Mar. 22, and May 9 to July 25.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 17.5°C Aug. 12, 14-18, 1977; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 14.5°C Aug. 21 and 24-26; minimum 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
NOV 03...	1130	138	47	7.0	6.0	12.0	12	--
MAR 23...	1000	48	38	7.3	1.5	13.5	14	--
MAY 08...	0900	26	35	7.2	4.5	12.5	13	13
JUL 26...	1430	5.1	57	7.1	13.5	10.5	24	24

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
NOV 03...	4.3	.4	--	2.5	3.3	3.4	.0	2.0	--
MAR 23...	5.1	.4	1.6	.2	6.5	2.4	.0	2.4	--
MAY 08...	4.8	.3	1.4	.1	1.4	1.7	.0	1.6	11
JUL 26...	8.3	.7	1.7	.4	1.9	1.8	.0	2.4	17

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
NOV 03...	.01	.00	.36	.36	--	.000	3	1.1
MAR 23...	.01	.04	.43	.47	.48	.170	4	.52
MAY 08...	.00	.00	.13	.13	.13	.010	--	--
JUL 26...	.01	.01	.39	.40	.41	.000	--	--

15085100 OLD TOM CREEK NEAR KASAAN--Continued

TEMPERATURE, WATER (DEG. C), NOVEMBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			---	---	1.5	1.5					---	---
2			---	---	3.0	1.5					---	---
3			6.0	4.0	2.5	---					---	---
4			4.0	3.5	1.5	1.0					---	---
5			5.0	3.5	1.5	1.0					---	---
6			5.0	3.5	2.0	1.5					---	---
7			4.0	3.0	2.0	1.5					---	---
8			3.5	3.0	3.0	2.0					---	---
9			3.0	1.5	3.0	2.0					---	---
10			2.0	.5	2.0	1.5					---	---
11			2.0	.5	1.5	.5					---	---
12			2.0	1.5	1.5	.5					---	---
13			2.0	1.5	2.0	1.5					---	---
14			2.0	1.5	2.0	1.5					---	---
15			2.5	.5	1.5	.5					---	---
16			2.5	1.5	1.0	---					---	---
17			1.5	---	.0	---					---	---
18			---	---	---	---					---	---
19			---	---	.0	---					---	---
20			---	---	---	---					---	---
21			.0	---	---	---					---	---
22			.5	.0	---	---					---	---
23			1.0	.5	---	---					1.5	.0
24			1.5	.5	---	---					1.5	.5
25			2.0	1.5	---	---					1.5	.0
26			2.5	1.5	---	---					1.5	---
27			3.0	2.0	---	---					1.0	---
28			2.5	2.5	---	---					1.5	.5
29			2.5	2.5	---	---					1.0	---
30			2.5	2.0	---	---					1.0	---
31			---	---	---	---					1.0	---
MONTH			6.0	.0							1.5	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1.5	.0	4.5	3.0			---	---	11.5	10.0	12.0	11.0
2	.5	---	4.0	3.0			---	---	11.0	10.5	12.0	11.0
3	1.5	---	4.0	3.0			---	---	13.0	10.5	11.0	10.5
4	1.5	.5	4.0	3.0			---	---	13.5	10.0	11.0	10.0
5	2.0	.5	5.0	2.5			---	---	12.5	10.5	10.5	9.5
6	2.0	.5	4.5	3.0			---	---	12.5	11.0	11.0	9.5
7	1.5	---	5.0	3.0			---	---	12.0	11.0	11.0	10.0
8	2.0	.5	3.5	3.0			---	---	12.5	10.0	11.0	10.0
9	2.0	1.0	---	---			---	---	13.0	9.5	10.5	10.0
10	2.0	1.0	---	---			---	---	13.0	9.5	11.0	9.5
11	3.0	.5	---	---			---	---	13.5	9.5	10.5	10.0
12	2.5	.5	---	---			---	---	13.0	10.0	11.0	10.0
13	2.5	1.0	---	---			---	---	14.0	10.5	11.0	10.5
14	2.5	1.0	---	---			---	---	14.0	11.0	11.5	10.5
15	2.5	1.0	---	---			---	---	12.5	11.5	11.5	10.5
16	3.0	.5	---	---			---	---	12.5	11.5	10.5	9.5
17	3.5	.5	---	---			---	---	13.0	11.5	11.0	9.5
18	3.0	.5	---	---			---	---	13.0	11.5	11.0	10.0
19	3.0	.5	---	---			---	---	14.0	11.0	10.5	9.5
20	3.5	.5	---	---			---	---	14.0	11.0	10.0	9.0
21	4.0	1.0	---	---			---	---	14.5	11.5	10.0	9.0
22	4.0	1.0	---	---			---	---	14.0	11.5	10.0	9.0
23	4.0	1.5	---	---			---	---	14.0	12.0	10.0	9.0
24	4.0	1.5	---	---			---	---	14.5	11.5	10.0	9.5
25	4.5	2.0	---	---			---	---	14.5	12.0	10.0	9.5
26	4.5	2.0	---	---			13.5	12.0	14.5	11.5	10.0	9.5
27	5.0	2.0	---	---			13.0	11.5	13.5	11.0	10.0	9.0
28	4.5	2.0	---	---			12.5	11.0	13.0	11.5	9.5	8.5
29	5.0	2.5	---	---			13.0	11.0	13.0	11.0	9.5	8.5
30	5.0	2.5	---	---			12.0	11.0	12.0	11.5	9.0	---
31	---	---	---	---			11.5	10.5	12.0	11.0	---	---
MONTH	5.0	.0		2.5					14.5	9.5	12.0	8.5

15086600 BIG CREEK NEAR POINT BAKER

LOCATION.--Lat 56°07'54", long 133°08'56", Hydrologic Unit 19060000, on Prince of Wales Island, in Tongass National Forest, on left bank 1 mi (1.6 km) upstream from mouth at Whale Passage, 2.5 mi (4.5 km) downstream from small unnamed lake, and 24 mi (39 km) southeast of Point Baker.

DRAINAGE AREA.--11.2 mi^2 (29.0 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 50 ft (15 m), from topographic map.

REMARKS.--Water-discharge records poor.

AVERAGE DISCHARGE.--16 years, 87.3 ft^3/s (2.472 m^3/s), 105.85 in/yr (2,689 mm/yr), 63,250 acre-ft/yr (78.0 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD: Maximum discharge, 2,390 ft^3/s (67.7 m^3/s) Sept. 3, 1966, gage height, 5.28 ft (1.609 m), from rating curve extended above 300 ft^3/s (8.5 m^3/s); minimum daily, 0.8 ft^3/s (0.023 m^3/s) Aug. 25, 28, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft^3/s (25.5 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 13	1600	943	26.7	4.32	1.317	Oct. 31	0100	*1,320	37.4	*5.02	1.530

Minimum daily discharge, 13 ft^3/s (0.37 m^3/s) Jan. 7-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	111	600	60	17	22	49	26	112	77	23	80	96
2	343	470	53	16	21	54	23	100	94	21	78	77
3	495	320	90	15	20	61	26	132	68	19	68	63
4	264	210	72	15	19	75	33	146	70	18	55	53
5	207	120	58	14	18	88	81	127	121	16	40	43
6	320	240	46	14	17	87	52	102	86	15	29	36
7	215	150	39	13	16	95	88	86	63	14	28	31
8	276	110	36	13	16	92	77	68	49	17	28	26
9	246	85	41	13	15	87	83	49	68	21	29	23
10	307	68	49	13	15	83	74	51	57	23	31	21
11	288	55	40	13	15	79	55	68	43	22	32	19
12	196	47	34	13	14	78	67	54	31	21	34	48
13	226	42	52	13	14	79	83	45	23	20	32	75
14	445	39	46	13	15	80	63	42	28	19	31	119
15	252	46	38	13	15	82	58	30	48	18	30	122
16	173	40	35	13	15	83	63	23	30	17	30	100
17	207	50	44	14	15	86	63	33	25	17	32	64
18	449	82	60	14	15	106	68	38	23	19	29	51
19	423	100	80	15	16	43	79	62	22	39	27	210
20	282	120	88	15	16	48	81	48	21	67	26	180
21	215	98	57	16	17	40	88	38	20	102	25	150
22	413	79	29	17	18	35	108	88	19	86	23	120
23	434	72	28	18	18	39	121	121	19	63	21	90
24	267	76	28	18	20	33	127	104	18	56	19	72
25	612	90	26	19	21	43	130	190	17	54	18	59
26	405	100	24	21	25	35	123	155	16	50	17	45
27	264	94	22	22	32	33	127	98	15	48	16	39
28	185	190	20	23	45	31	134	70	16	52	14	84
29	117	93	19	24	---	37	132	51	20	59	17	89
30	745	74	18	24	---	30	125	36	24	69	30	72
31	958	---	17	23	---	28	---	31	---	77	97	---
TOTAL	10340	3960	1349	504	525	1919	2458	2398	1231	1162	1066	2277
MEAN	334	132	43.5	16.3	18.8	61.9	81.9	77.4	41.0	37.5	34.4	75.9
MAX	958	600	90	24	45	106	134	190	121	102	97	210
MIN	111	39	17	13	14	28	23	23	15	14	14	19
CFSM	29.8	11.8	3.88	1.46	1.68	5.53	7.31	6.91	3.66	3.35	3.07	6.78
IN.	34.34	13.15	4.48	1.67	1.74	6.37	8.16	7.96	4.09	3.86	3.54	7.56
AC-FT	20510	7850	2680	1000	1040	3810	4880	4760	2440	2300	2110	4520

CAL YR 1978 TOTAL 36401.6 MEAN 99.7 MAX 958 MIN 8.8 CFSM 8.90 IN 120.89 AC-FT 72200
WTR YR 1979 TOTAL 29189.0 MEAN 80.0 MAX 958 MIN 13 CFSM 7.14 IN 96.94 AC-FT 57900

15086600 BIG CREEK NEAR POINT BAKER--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1963 to October 1971, March 1972 to November 1974, April 1975 to February 1976, June to October 1976, and February 1977 to current year.

INSTRUMENTATION.--Temperature recorder since Aug. 30, 1963.

REMARKS.--Records good except for period of missing record, Jan. 15 to Mar. 16.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 23.5°C June 13, 1969; minimum 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 20.0°C Aug. 12-14; minimum 0.0°C on many days during winter period.

WATER QUALITY DATA. WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW. INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN. DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS. NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
MAR 17...	1200	85	120	--	--	--	55	--	21
MAY 06...	1130	98	122	7.5	8.5	11.1	54	0	21
JUL 24...	1300	56	145	--	17.0	--	65	62	25

DATE	MAGNESIUM. DISSOLVED (MG/L AS MG)	SODIUM. DISSOLVED (MG/L AS NA)	POTASSIUM. DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE. DISSOLVED (MG/L AS CL)	FLUORIDE. DISSOLVED (MG/L AS F)	SILICA. DISSOLVED (MG/L AS SIO2)	SOLIDS. SUM OF CONSTITUENTS. DISSOLVED (MG/L)
MAR 17...	.5	1.8	.3	--	4.0	3.5	.0	1.8	--
MAY 06...	.3	1.8	.4	68	1.9	2.5	.0	1.2	64
JUL 24...	.6	2.0	.5	--	1.4	2.3	.0	1.3	34

DATE	NITROGEN. NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN. AMMONIA DISSOLVED (MG/L AS N)	NITROGEN. ORGANIC DISSOLVED (MG/L AS N)	NITROGEN.AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN. DISSOLVED (MG/L AS N)	PHOSPHORUS. DISSOLVED (MG/L AS P)	SEDIMENT. SUSPENDED (MG/L)	SEDIMENT DISCHARGE. SUSPENDED (T/DAY)
MAR 17...	.07	.03	.14	.17	.24	.020	2	.46
MAY 06...	.16	.16	.86	1.0	1.2	.170	0	.00
JUL 24...	.15	.04	.52	.56	.71	.060	1	.15

15086600 BIG CREEK NEAR POINT BAKER--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMRER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	10.5	---	7.5	7.0	3.5	3.5	.5	.0			---	---
2	9.5	9.0	7.0	6.0	4.0	3.5	.5	.5			---	---
3	10.0	9.0	7.0	6.0	4.0	3.5	.5	.5			---	---
4	9.5	9.5	6.0	6.0	3.5	3.0	.5	.0			---	---
5	9.5	9.0	6.0	5.5	3.5	3.0	.0	.0			---	---
6	9.5	9.0	6.5	6.0	3.5	3.0	.0	.0			---	---
7	10.0	9.5	6.0	5.5	3.5	2.5	.0	.0			---	---
8	9.5	9.0	6.0	5.0	4.0	3.0	.0	.0			---	---
9	9.0	8.0	5.0	4.0	4.0	---	.0	.0			---	---
10	9.0	8.0	5.0	---	3.5	3.0	.5	.0			---	---
11	9.0	8.0	4.0	2.5	3.0	2.0	.5	.5			---	---
12	8.5	8.0	4.0	3.0	3.0	2.0	.5	.0			---	---
13	8.5	8.0	4.0	---	3.0	2.5	.0	.0			---	---
14	8.5	8.5	4.0	3.0	3.0	2.0	.0	.0			---	---
15	9.0	8.0	4.5	3.0	3.0	2.0	---	---			---	---
16	9.0	8.0	3.5	3.0	2.0	2.0	---	---			---	---
17	8.5	8.0	3.0	1.5	2.0	1.0	---	---			3.5	---
18	9.0	8.5	2.0	1.0	2.0	.5	---	---			3.5	2.5
19	8.5	8.0	1.5	1.0	2.5	1.0	---	---			3.5	2.5
20	8.5	8.0	2.0	.5	2.5	1.5	---	---			4.0	---
21	8.0	8.0	2.0	---	2.0	1.0	---	---			4.0	2.5
22	8.0	8.0	3.0	2.0	2.0	.5	---	---			4.0	2.0
23	8.0	---	3.0	2.0	2.0	.5	---	---			4.0	2.5
24	7.5	7.0	3.0	2.5	2.0	1.5	---	---			4.5	2.5
25	7.5	7.0	4.0	3.0	1.5	.0	---	---			4.5	2.5
26	7.5	7.0	4.0	---	1.5	.5	---	---			4.5	2.0
27	7.5	7.0	4.0	---	.5	.0	---	---			3.0	2.5
28	7.0	7.0	4.0	---	1.5	1.0	---	---			5.0	2.5
29	7.0	6.5	4.0	4.0	1.0	.0	---	---			5.0	2.5
30	7.5	---	4.0	3.5	1.0	.0	---	---			5.0	1.5
31	7.5	7.5	---	---	.5	.5	---	---			5.0	1.0
MONTH	10.5	6.5	7.5	.5	4.0	.0		.0			5.0	

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMRER	
1	5.5	2.5	11.5	8.0	9.5	8.5	15.5	12.0	15.0	12.5	14.0	11.5
2	3.5	2.0	10.0	8.5	11.5	9.0	15.5	11.5	14.5	11.5	15.5	10.0
3	5.0	2.0	8.5	8.0	11.0	9.5	15.5	11.5	15.5	13.0	17.0	13.5
4	4.5	3.0	9.0	7.5	10.0	9.0	16.0	13.0	17.5	13.0	15.0	13.0
5	4.0	2.5	11.0	7.0	10.0	9.0	18.5	12.0	17.5	10.0	14.0	11.5
6	4.5	2.5	9.5	8.0	11.0	9.0	17.5	13.5	16.5	15.0	13.5	11.0
7	4.0	2.0	10.0	8.0	11.0	9.5	16.0	13.5	16.5	13.0	15.5	10.5
8	4.5	3.0	10.0	7.5	11.0	9.5	16.0	12.5	17.0	12.5	16.0	13.0
9	5.0	3.0	10.0	7.0	13.0	9.0	15.0	13.5	17.5	12.5	15.0	13.5
10	5.0	3.0	8.5	7.5	14.5	10.0	15.0	13.5	19.0	12.5	15.5	13.0
11	5.0	2.0	10.0	7.0	14.5	9.5	17.5	12.5	19.5	13.0	14.0	12.0
12	6.0	3.0	9.5	7.0	13.0	11.0	16.0	13.5	20.0	14.5	12.0	10.5
13	5.5	---	10.0	7.0	13.0	11.0	16.0	13.0	20.0	14.0	12.0	11.5
14	5.5	3.0	12.0	7.0	12.0	---	15.5	13.5	20.0	13.5	12.5	12.0
15	6.0	3.0	11.0	7.5	13.5	9.5	17.5	13.5	18.0	15.5	12.5	12.5
16	6.5	3.0	10.0	7.5	16.5	9.5	16.0	13.5	17.0	15.5	12.5	11.5
17	7.0	3.0	11.5	7.5	14.0	11.5	15.0	13.0	17.0	15.0	12.5	11.5
18	7.0	---	11.0	8.0	14.5	11.5	18.0	13.5	18.0	14.5	12.5	11.5
19	7.0	3.5	10.0	8.0	14.0	12.0	15.5	13.0	18.5	13.5	13.0	11.5
20	7.5	3.5	11.0	8.5	14.5	10.0	14.0	13.0	19.0	13.5	13.0	11.0
21	7.5	---	12.0	8.0	14.5	11.5	13.0	12.0	19.0	14.5	12.5	11.0
22	7.5	4.0	9.5	8.0	16.5	11.5	13.0	12.0	18.5	14.0	13.0	11.5
23	8.0	4.5	10.5	---	16.0	12.5	14.5	12.0	19.0	14.5	12.0	11.0
24	8.0	---	9.5	8.5	16.0	12.0	17.5	12.0	19.0	14.5	12.5	11.0
25	8.0	5.0	9.0	8.0	18.0	13.0	18.5	13.5	18.5	14.5	12.0	11.0
26	8.5	5.5	10.0	8.0	19.0	12.0	17.0	15.0	18.5	14.0	11.5	11.0
27	9.0	5.5	10.5	8.5	16.5	13.0	17.5	13.5	17.5	15.0	11.5	10.5
28	9.0	6.0	10.5	9.0	14.5	13.0	18.5	14.0	16.5	14.5	11.0	10.5
29	10.5	7.0	10.5	9.0	14.0	11.5	18.5	14.5	16.0	14.0	11.5	10.5
30	11.5	8.0	10.0	8.5	14.0	10.0	16.0	15.0	15.0	13.5	10.5	10.0
31	---	---	10.5	9.5	---	---	15.0	13.5	14.5	13.5	---	---
MONTH	11.5	2.0	12.0	7.0	19.0	8.5	18.5	11.5	20.0	10.0	17.0	10.0
YEAR	20.0	.0										

15086960 SUNRISE LAKE OUTLET NEAR WRANGELL

LOCATION.--Lat 56°24'44", long 132°29'30", in NE¼NW¼ sec.17, T.63 S., R.83 E., Hydrologic Unit 19060000, on Woronkofski Island, in Tongass National Forest, on left bank of lake outlet and 5.0 mi (8.0 km) southwest of Wrangell.

DRAINAGE AREA.--1.17 mi^2 (3.03 km^2).

PERIOD OF RECORD.--September 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,950 ft (594 m), from topographic map.

REMARKS.--Records good. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 237 ft^3/s (6.71 m^3/s) Oct. 31, 1978, gage height, 4.27 ft (1.301 m); minimum daily, 0.93 ft^3/s (0.026 m^3/s) Feb. 24-28, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 237 ft^3/s (6.71 m^3/s) Oct. 31, gage height, 4.27 ft (1.301 m); minimum daily, 0.93 ft^3/s (0.026 m^3/s) Feb. 24-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	55	6.0	2.1	2.0	.96	4.6	34	43	17	18	2.4
2	29	40	10	2.0	1.9	1.8	4.5	34	61	16	15	3.2
3	42	15	11	2.0	1.7	2.9	4.6	35	27	19	10	1.7
4	12	10	8.0	1.8	2.8	2.9	4.8	32	27	17	7.0	3.3
5	12	9.8	6.2	1.8	3.0	4.1	6.0	22	27	17	5.4	2.8
6	34	34	5.4	1.8	3.0	5.8	6.4	18	24	17	4.6	2.6
7	54	16	7.5	1.8	2.8	8.1	7.4	16	19	16	4.1	2.2
8	21	10	12	1.8	2.6	6.4	7.6	17	15	16	3.6	2.1
9	20	7.2	14	1.7	2.0	6.3	6.6	15	18	18	3.2	1.8
10	28	6.0	8.8	1.4	1.9	4.9	6.3	13	18	19	2.8	2.0
11	21	7.7	6.3	1.4	1.7	4.6	5.7	13	14	17	2.5	2.2
12	49	6.0	7.3	1.4	1.6	4.7	5.7	11	13	15	2.4	11
13	72	5.1	11	1.4	1.4	4.2	5.5	10	12	13	2.3	64
14	30	5.1	8.1	1.5	1.4	3.5	5.5	8.9	16	11	2.2	21
15	13	7.1	5.4	1.7	1.4	3.6	5.5	7.3	27	11	2.1	24
16	6.1	5.5	4.9	2.5	1.2	3.6	5.5	6.8	19	9.3	1.9	19
17	37	4.5	4.0	2.9	1.2	3.7	5.5	11	17	11	1.8	24
18	68	3.9	4.2	3.9	1.2	4.0	5.5	13	16	12	1.7	11
19	29	3.5	6.8	3.2	1.2	3.8	5.8	12	19	17	1.6	7.3
20	10	3.3	6.0	2.7	1.1	4.1	6.0	11	16	24	1.6	5.3
21	11	3.1	5.2	2.6	1.1	4.5	6.6	10	15	33	1.6	4.4
22	22	3.0	4.8	2.9	1.0	4.8	7.3	14	17	30	1.5	4.6
23	34	3.2	4.9	2.4	.99	4.8	8.5	53	17	20	1.4	5.9
24	11	4.4	4.3	3.0	.93	4.9	10	31	16	13	1.4	12
25	47	5.7	3.4	3.1	.93	4.9	12	38	15	12	1.3	13
26	18	16	3.2	3.5	.93	4.8	13	43	15	6.1	1.2	11
27	13	63	2.8	2.9	.93	4.8	15	17	16	5.3	1.2	14
28	10	27	2.5	2.5	.93	4.9	20	12	16	4.6	1.1	13
29	7.8	11	2.3	2.3	---	4.9	31	11	25	2.0	1.0	8.9
30	102	7.8	2.2	2.1	---	4.8	33	11	25	4.4	.98	32
31	133	---	2.1	2.0	---	4.5	---	17	---	7.5	1.2	---
TOTAL	1001.2	398.9	190.6	70.1	44.84	136.56	271.4	597.0	625	450.2	107.68	331.7
MEAN	32.3	13.3	6.15	2.26	1.60	4.41	9.05	19.3	20.8	14.5	3.47	11.1
MAX	133	63	14	3.9	3.0	8.1	33	53	61	33	18	64
MIN	5.3	3.0	2.1	1.4	.93	.96	4.5	6.8	12	2.0	.98	1.7
CFSM	27.6	11.4	5.26	1.93	1.37	3.77	7.74	16.5	17.8	12.4	2.97	9.49
IN.	31.81	12.67	6.05	2.23	1.42	4.34	8.62	18.97	19.85	14.30	3.42	10.54
AC-FT	1990	791	378	139	89	271	538	1180	1240	893	214	658

CAL YR 1978 TOTAL 3984.90 MEAN 10.9 MAX 133 MIN 2.1 CFSM 9.32 IN 126.59 AC-FT 7900
WTR YR 1979 TOTAL 4225.18 MEAN 11.6 MAX 133 MIN .93 CFSM 9.92 IN 134.22 AC-FT 8380

15087570 HAMILTON CREEK NEAR KAKE

LOCATION.--Lat 56°52'21", long 133°40'30", in SE¼NE¼ sec.1, T.58 S., R.74 E., Hydrologic Unit 19060000, on Kupreanof Island, in Tongass National Forest, 2.9 mi (4.7 km) upstream from mouth at Hamilton Bay and 12 mi (19 km) southeast of Kake.

DRAINAGE AREA.--65 mi² (168.4 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Annual maximums, water years 1972-76. October 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 25 ft, (8 m), from topographic map. Prior to October 1976, crest-stage gage at same datum.

REMARKS.--Records fair except those for period of no gage-height record, Mar. 3 to May 1, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,600 ft³/s (442 m³/s), revised, Jan. 30, 1976, gage height, 14.97 ft (4.563 m), from floodmarks at present site and datum, from rating curve extended above 2,400 ft³/s (68 m³/s) on basis of slope-area measurement at gage height, 13.36 ft (4.072 m) for flood of Oct. 3, 1979; minimum daily, 11 ft³/s (0.31 m³/s) Aug. 21, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,100 ft³/s (399 m³/s) Oct. 31, gage height, 14.60 ft (4.450 m), from rating curve extended as explained above; minimum daily, 29 ft³/s (0.82 m³/s) Aug. 30.

REVISIONS.--The maximum discharge for the water year 1976 has been revised to 15,600 ft³/s (442 m³/s) Jan. 30, 1976, gage height, 14.97 ft (4.563 m) superseding figure published in the report for 1976.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	159	1950	175	83	87	71	88	212	460	172	266	79
2	1250	1810	756	79	89	76	82	226	460	112	1160	124
3	1520	946	1100	75	92	84	75	297	212	89	409	175
4	283	380	285	72	97	96	78	289	163	101	163	144
5	173	680	163	68	100	120	84	254	172	124	107	117
6	873	559	126	64	108	190	92	199	193	93	85	89
7	356	369	119	61	90	165	107	202	169	77	72	75
8	1770	351	814	58	81	158	130	163	160	74	63	65
9	944	195	763	55	72	200	99	187	199	72	57	59
10	920	125	380	53	66	170	94	193	277	79	54	65
11	417	106	199	50	60	160	96	380	175	77	50	70
12	191	125	181	47	56	153	100	281	121	72	47	149
13	1590	130	3130	44	53	148	107	193	101	67	46	3820
14	485	108	1410	41	51	142	115	196	139	67	43	844
15	502	118	555	46	50	140	122	141	395	79	42	867
16	249	211	376	52	50	140	128	114	199	91	41	262
17	646	268	175	59	49	142	121	149	124	262	41	445
18	5420	403	199	66	50	143	120	139	110	273	41	281
19	1240	496	273	74	51	148	119	141	121	1260	38	169
20	388	491	340	82	53	158	120	254	103	1260	37	117
21	299	438	380	89	56	170	122	184	91	749	36	93
22	2320	407	230	96	65	150	125	187	99	532	35	87
23	2180	541	170	102	57	152	130	756	97	297	35	119
24	412	1610	150	108	55	145	138	385	103	172	34	196
25	2800	2480	140	113	58	140	142	707	89	114	31	273
26	577	3410	130	118	60	132	148	520	75	87	31	216
27	565	4080	115	109	63	125	158	445	67	75	31	859
28	276	938	105	102	67	118	168	226	62	67	31	585
29	159	335	98	99	---	110	180	152	74	62	30	331
30	4220	270	93	95	---	102	200	126	273	67	29	654
31	4160	---	87	91	---	95	---	114	---	129	30	---
TOTAL	37344	24330	13217	2351	1886	4253	3588	8012	5083	6852	3215	11429
MEAN	1205	811	426	75.8	67.4	137	120	258	169	221	104	381
MAX	5420	4080	3130	118	108	200	200	756	460	1260	1160	3820
MIN	159	106	87	41	49	71	75	114	62	62	29	59
CFSM	18.5	12.5	6.55	1.17	1.04	2.11	1.85	3.97	2.60	3.40	1.60	5.86
IN.	21.37	13.92	7.56	1.35	1.08	2.43	2.05	4.59	2.91	3.92	1.84	6.54
AC-FT	74070	48260	26220	4660	3740	8440	7120	15890	10080	13590	6380	22670

CAL YR 1978 TOTAL 109981 MEAN 301 MAX 5420 MIN 19 CFSM 4.63 IN 62.94 AC-FT 218100
WTR YR 1979 TOTAL 121560 MEAN 333 MAX 5420 MIN 29 CFSM 5.12 IN 69.57 AC-FT 241100

15087570 HAMILTON CREEK NEAR KAKE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
MAY						
01...	1800	215	20	--	9.5	6.5
JUL						
17...	1400	398	26	6.8	15.0	13.5

15087590 ROCKY PASS CREEK NEAR POINT BAKER

LOCATION.--Lat 57°37'10", long 133°44'10", in SW¼SE¼ sec.34, T.60 S., R.74 E., Hydrologic Unit 19060000, on Kuiu Island, in Tongass National Forest, on left bank 0.5 mi (0.8 km) upstream from mouth and 22 mi (35 km) northwest of Point Baker.

DRAINAGE AREA.--3.27 mi^2 (8.47 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 65 ft (19.8 m), from topographic map.

REMARKS.--Water-discharge records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 792 ft^3/s (22.4 m^3/s) Sept. 13, 1979, gage height, 5.32 ft (1.622 m) from rating curve extended above 40 ft^3/s (1.1 m^3/s) on basis of slope-area measurement at gage height 6.20 ft (1.890 m) for flood of Oct. 9, 1979; minimum daily, 0.15 ft^3/s (0.004 m^3/s) Aug. 31, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 792 ft^3/s (22.4 m^3/s) Sept. 13, gage height, 5.32 ft (1.622 m); from rating curve extended as explained above; minimum daily, 0.60 ft^3/s (0.017 m^3/s) Aug. 16.

REVISIONS.--The maximum discharges for water years 1977 and 1978 have been revised to 315 ft^3/s (8.92 m^3/s), Dec. 12, 1976, gage height, 3.85 ft (1.173 m), and 722 ft^3/s (20.4 m^3/s), Oct. 10, 1977, gage height, 5.15 ft (1.570 m), superseding figures published in the reports for 1977 and 1978.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	69	12	3.3	6.2	2.1	5.8	2.7	29	5.8	114	1.9
2	83	36	53	3.3	12	44	6.5	3.4	26	5.8	68	2.5
3	23	49	38	3.2	25	399	7.7	10	11	5.6	9.4	5.0
4	8.2	49	22	3.2	46	364	11	11	16	4.7	4.0	7.2
5	24	57	15	3.3	37	301	23	11	12	4.5	2.7	3.3
6	69	24	12	3.4	22	278	21	5.0	10	4.2	2.0	2.7
7	14	19	25	3.5	15	160	19	3.3	8.0	4.2	1.6	2.4
8	62	13	50	3.7	10	70	17	2.5	9.8	4.0	1.4	2.0
9	35	6.4	35	3.8	9.4	20	15	2.2	12	4.7	1.2	1.7
10	42	4.5	24	4.0	7.0	29	14	6.2	18	7.2	1.1	1.7
11	16	5.6	43	4.2	5.9	39	13	10	11	7.7	1.1	23
12	12	5.4	79	4.5	4.8	62	11	7.2	6.2	6.8	1.0	59
13	134	4.3	67	4.8	4.2	24	10	6.2	5.4	5.8	.94	300
14	14	3.9	50	5.6	3.7	38	9.0	8.2	9.5	5.8	.90	40
15	24	14	28	7.0	3.5	52	8.2	4.0	18	5.6	.80	6.2
16	7.7	9.4	14	11	3.3	30	7.5	3.2	12	5.4	.60	3.7
17	126	8.2	8.8	18	3.1	18	6.9	14	5.0	16	.90	3.2
18	166	12	16	25	3.0	27	6.1	14	4.0	7.7	.76	6.0
19	20	17	30	14	2.8	49	5.5	7.2	3.9	36	.90	5.2
20	19	17	60	7.8	2.6	40	5.0	4.7	3.7	123	1.0	4.5
21	26	17	30	10	2.5	33	4.5	3.3	3.4	114	1.2	3.8
22	150	14	14	16	2.3	24	4.3	14	3.4	60	1.3	3.4
23	47	9.7	18	26	2.2	19	3.9	18	3.6	17	1.4	4.9
24	34	9.4	11	21	2.0	16	4.0	15	3.4	7.0	1.1	6.0
25	67	9.4	5.5	13	1.9	13	4.8	26	3.3	5.0	1.0	8.0
26	20	9.4	4.4	17	1.8	11	5.9	13	3.0	3.8	.90	11
27	41	9.4	4.1	28	1.7	9.3	7.2	6.0	2.8	2.8	1.0	17
28	11	6.8	3.9	20	1.9	8.4	7.9	4.0	2.7	3.2	1.1	26
29	7.6	61	3.6	15	---	7.6	5.7	3.2	3.3	3.5	1.2	9.7
30	217	50	3.5	11	---	7.0	4.0	2.7	3.9	2.4	1.4	102
31	79	---	3.4	7.5	---	6.4	---	3.4	---	8.5	1.6	---
TOTAL	1610.5	619.8	783.2	321.1	242.8	2200.8	274.4	244.6	263.3	497.7	227.50	673.0
MEAN	52.0	20.7	25.3	10.4	8.67	71.0	9.15	7.89	8.78	16.1	7.34	22.4
MAX	217	69	79	28	46	399	23	26	29	123	114	300
MIN	7.6	3.9	3.4	3.2	1.7	2.1	3.9	2.2	2.7	2.4	.60	1.7
CFSM	15.9	6.33	7.74	3.18	2.65	21.7	2.80	2.41	2.69	4.92	2.25	6.85
IN.	18.32	7.05	8.91	3.65	2.76	25.03	3.12	2.78	2.99	5.66	2.59	7.65
AC-FT	3190	1230	1550	637	482	4370	544	485	522	987	451	1330

CAL YR 1978 TOTAL 4746.07 MEAN 13.0 MAX 217 MIN .15 CFSM 3.98 IN 53.98 AC-FT 9410
WTR YR 1979 TOTAL 7958.70 MEAN 21.8 MAX 399 MIN .60 CFSM 6.67 IN 90.51 AC-FT 15790

15087590 ROCKY PASS CREEK NEAR POINT BAKER--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: February 1978 to May 1979.

INSTRUMENTATION.--Temperature recorder since Feb. 1, 1978.

REMARKS.--Records poor. Interruptions in the record that occurred throughout much of the year were due to malfunctions of the recorder.

EXTREMES FOR CURRENT PERIOD.--
WATER TEMPERATURE: Maximum observed, 9.0°C May 6; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
NOV 06...	1300	21	--	--	5.0	--	2	--	.5
FEB 02...	1330	3.4	30	6.4	.5	13.2	5	2	.9
MAY 02...	1400	2.2	14	--	6.5	11.8	2	--	.3
JUL 19...	1200	8.5	23	--	13.0	--	5	5	1.2

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
NOV 06...	.3	1.5	.1	--	3.8	2.6	.0	.8	--
FEB 02...	.6	2.2	.0	4	6.0	3.8	.0	4.9	21
MAY 02...	.3	2.4	.2	--	6.5	3.6	.1	3.3	17
JUL 19...	.6	2.0	.5	--	4.3	3.2	.0	3.4	16

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
NOV 06...	.09	.02	.52	.54	--	.340	--	--
FEB 02...	.08	.10	.50	.60	.68	.160	--	--
MAY 02...	.17	.01	.82	.83	1.0	.220	0	.00
JUL 19...	.23	.04	.65	.69	.92	.080	--	--

15087590 ROCKY PASS CREEK NEAR POINT BAKER--Continued

TEMPERATURE, WATER (DEG. C), OCTOBER 1978 TO MAY 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			---	---	1.0	.5					---	---
2			---	---	2.0	1.0					---	---
3			---	---	2.0	1.5					---	---
4			---	---	1.5	.5					---	---
5			---	---	1.0	.5					---	---
6			5.0	4.5	1.0	1.0					---	---
7			4.5	3.5	2.0	1.0					---	---
8			3.5	2.5	2.5	2.0					---	---
9			2.0	.5	2.5	2.0					---	---
10			.5	.0	2.0	1.0					---	---
11			1.0	.0	1.0	.5					---	---
12			1.0	.0	1.5	.5					---	---
13			.5	.0	1.5	1.0					---	---
14			.5	.0	1.5	1.0					.5	.0
15			---	---	1.0	.5					.5	.0
16			---	---	.5	.0					1.0	.0
17			---	---	---	---					1.0	.5
18			---	---	---	---					.5	.5
19			---	---	---	---					.5	.5
20			---	---	---	---					.5	.5
21			---	---	---	---					1.0	.0
22			---	---	---	---					1.0	.0
23			---	---	---	---					1.5	.5
24			---	---	---	---					1.5	.0
25			1.5	.0	---	---					1.5	.0
26			1.5	1.0	---	---					1.0	.0
27			2.0	1.0	---	---					.5	.0
28			1.5	1.5	---	---					1.5	.5
29			2.0	1.5	---	---					1.0	.5
30			2.0	1.0	---	---					.5	.0
31			---	---	---	---					.0	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1.0	.0	6.5	6.5								
2	.5	.0	6.5	6.5								
3	1.5	.0	6.5	5.5								
4	1.5	.5	7.0	6.0								
5	1.0	.5	8.5	6.0								
6	1.5	.5	9.0	6.5								
7	1.5	.5	---	---								
8	2.0	1.0	---	---								
9	2.5	1.0	---	---								
10	2.5	1.0	---	---								
11	2.0	.5	---	---								
12	2.5	1.0	---	---								
13	2.5	1.0	---	---								
14	2.5	1.0	---	---								
15	3.0	1.0	---	---								
16	2.5	1.0	---	---								
17	3.0	.5	---	---								
18	3.5	.5	---	---								
19	3.5	1.0	---	---								
20	3.5	1.0	---	---								
21	4.0	1.5	---	---								
22	4.5	1.5	---	---								
23	4.5	2.0	---	---								
24	5.0	2.0	---	---								
25	5.0	2.5	---	---								
26	5.5	2.5	---	---								
27	6.0	3.0	---	---								
28	6.5	6.0	---	---								
29	6.5	6.5	---	---								
30	6.5	6.5	---	---								
31	---	---	---	---								
MONTH	6.5	.0										

15087610 NAKWASINA RIVER NEAR SITKA

LOCATION.--Lat 57°15'37", long 135°19'54", in NW¼SW¼ sec.24, T.53 S., R.63 E., Greater Sitka Borough, Hydrologic Unit 19060000, on Baranof Island, in Tongass National Forest, on left bank 0.7 mi (1.1 km) upstream from mouth at Nakwasina Bay and 15 mi (24.1 km) north of Sitka.

DRAINAGE AREA.--31.9 mi² (82.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage 20 ft (6.1 m), from topographic map.

REMARKS.--Water-discharge records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,470 ft³/s (127 m³/s), revised, Sept. 12, 1977, gage height, 7.61 ft (2.320 m), from rating curve extended above 600 ft³/s (17 m³/s) on basis of slope-area measurement at gage height of 9.55 ft (2.911 m) for flood of Oct. 9, 1979; minimum daily, 33 ft³/s (0.93 m³/s), Jan. 17-18, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,270 ft³/s (121 m³/s) Oct. 18, gage height, 7.39 ft (2.252 m), from rating curve extended as explained above; minimum daily, 34 ft³/s (0.96 m³/s) Jan 11, 12, Mar. 1, 2.

REVISIONS.--The maximum discharges for water years 1977 and 1978 have been revised to 4,470 ft³/s (127 m³/s) Sept. 12, 1977, gage height, 7.61 ft (2.320 m) and 2,210 ft³/s (62.6 m³/s) Oct. 17, 1977, gage height, 4.82 ft (1.469 m), respectively. Revised daily discharges, in cubic feet per second, for the high-water periods in October and November 1976, September and October 1977, and June 1978 are given below. These figures supersede those published in the reports for 1977 and 1978.

Oct. 26, 1976...	2,160	Nov. 3, 1976...	1,760	Oct. 14, 1977...	1,080	Oct. 17, 1977...	1,390
27.........	921	Sept.11, 1977...	1,540	15.........	1,170	,18.........	1,030
Nov. 2.........	1,240	12.........	2,310	16.........	1,010	June 1, 1978...	857

Month	Cfs-days	Mean	Maximum	Minimum	Per square mile	Runoff in Inches	Runoff in Acre-feet
October 1976..............................	16,424	530	2,160	232	16.6	19.15	32,580
November 1976..............................	11,789	393	1,760	187	12.3	13.75	23,380
September 1977..............................	14,187	473	2,310	119	14.8	16.54	28,140
WTR YR 1977..............................	122,785	336	2,310	68	10.5	143.18	243,500
October 1977..............................	15,568	502	1,390	151	15.7	18.15	30,880
CAL YR 1977..............................	106,696	292	2,310	37	9.15	124.42	211,600
June 1978..............................	17,282	576	925	411	18.1	20.15	34,280
WTR YR 1978..............................	90,156	247	1,390	33	7.74	105.13	178,800

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	294	760	350	49	46	34	121	438	633	497	617	335
2	475	850	450	47	62	34	118	431	692	530	648	342
3	678	600	660	44	71	44	116	503	625	557	513	358
4	564	350	400	42	71	64	114	535	589	567	452	344
5	478	450	200	41	66	114	115	520	621	525	423	338
6	1540	760	155	39	64	128	119	506	617	560	444	345
7	978	500	250	38	56	217	117	478	608	649	465	334
8	552	300	550	37	55	167	116	438	573	575	439	309
9	604	230	380	36	55	297	114	383	566	584	417	305
10	682	175	300	35	44	278	113	375	546	609	396	302
11	865	150	225	34	42	245	113	490	497	566	380	304
12	601	130	175	34	42	223	113	418	460	524	375	392
13	1080	110	440	34	42	212	113	374	461	481	373	808
14	610	100	330	35	42	197	113	339	492	473	361	616
15	888	86	170	36	42	191	113	329	510	468	362	580
16	474	79	140	37	42	171	113	332	519	455	364	532
17	1840	72	130	39	42	164	118	380	510	583	358	678
18	3400	67	125	41	42	162	135	403	538	549	366	618
19	1800	63	125	44	44	158	144	425	548	562	362	553
20	500	61	122	48	44	233	160	394	500	630	351	507
21	420	62	120	51	44	211	167	371	475	561	350	473
22	640	64	110	54	44	190	190	388	477	586	353	450
23	800	73	100	55	44	190	249	475	489	536	345	479
24	580	90	88	56	44	190	288	490	461	484	347	501
25	2600	150	82	55	38	185	291	525	462	449	368	595
26	700	680	74	54	36	174	336	558	464	428	370	523
27	400	1100	67	52	36	167	382	513	470	403	354	547
28	320	1300	61	48	35	157	461	459	517	382	347	628
29	2800	580	57	41	---	148	472	447	590	363	339	573
30	2000	420	54	45	---	138	450	459	538	370	327	563
31	1300	---	51	46	---	124	---	509	---	433	362	---
TOTAL	31463	10332	6541	1347	1335	5207	5684	13685	16048	15939	12328	14232
MEAN	1015	344	211	43.5	47.7	168	189	441	535	514	398	474
MAX	3400	1300	660	56	71	297	472	558	692	649	648	808
MIN	294	61	51	34	35	34	113	329	460	363	327	302
CFSM	31.8	10.8	6.61	1.36	1.50	5.27	5.93	13.8	16.8	16.1	12.5	14.9
IN.	36.69	12.05	7.63	1.57	1.56	6.07	6.63	15.96	18.71	18.59	14.38	16.60
AC-FT	62410	20490	12970	2670	2650	10330	11270	27140	31830	31610	24450	28230

CAL YR 1978 TOTAL 118025 MEAN 323 MAX 3400 MIN 33 CFSM 10.1 IN 137.63 AC-FT 234100
WTR YR 1979 TOTAL 134141 MEAN 368 MAX 3400 MIN 34 CFSM 11.5 IN 156.42 AC-FT 266100

15087610 NAKWASINA RIVER NEAR SITKA--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: September 1976 to current year.

INSTRUMENTATION.--Temperature recorder since Sept. 4, 1976.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 10.5°C Sept. 13, 1979; minimum, 0.5°C Feb. 14, 15, 1979.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 10.5°C Sept. 13; minimum, 0.5°C Feb. 14, 15.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.5	7.0	5.5	4.0	5.0	4.5	4.0	3.5	4.0	3.0	4.0	3.0
2	7.0	6.5	5.5	4.0	5.0	4.0	4.0	3.0	3.5	3.0	3.5	3.0
3	7.0	6.5	5.0	4.5	4.0	3.5	3.5	3.0	3.5	3.0	3.5	3.0
4	7.0	6.5	5.5	5.0	4.5	3.5	3.5	3.0	3.5	2.0	3.5	2.5
5	7.5	7.0	5.5	4.5	4.5	4.5	3.0	3.0	3.0	2.0	2.5	2.0
6	8.0	7.0	5.0	4.5	4.5	4.5	3.0	2.5	2.5	2.0	2.5	2.0
7	7.5	7.0	5.0	4.5	4.5	3.0	2.5	2.5	2.0	1.5	2.5	1.5
8	7.0	7.0	5.0	4.5	4.5	3.0	3.0	2.5	2.0	1.5	3.0	2.5
9	7.0	6.5	5.0	4.5	4.5	3.5	3.5	3.0	1.5	1.5	2.5	2.0
10	6.5	6.5	5.0	4.5	4.0	3.5	4.0	3.5	1.5	1.0	3.5	2.5
11	6.5	6.0	5.0	4.0	4.0	4.0	4.0	3.0	2.0	1.0	3.5	2.5
12	6.5	6.0	5.0	4.5	4.5	3.5	3.0	3.0	2.0	1.5	3.5	3.0
13	7.0	6.0	5.5	5.0	4.5	4.0	3.0	2.5	2.0	1.5	4.0	3.0
14	7.0	6.0	5.5	4.5	4.0	3.5	3.5	2.5	1.5	.5	4.0	3.0
15	7.0	6.0	5.0	4.0	4.5	4.0	3.5	3.0	2.5	.5	4.0	3.0
16	6.5	5.5	4.0	3.5	4.0	3.0	4.0	2.5	2.5	2.0	4.0	3.0
17	8.0	6.0	4.0	3.5	4.0	3.5	3.0	2.5	3.0	2.5	4.0	3.0
18	8.0	4.5	5.0	4.0	4.5	4.0	3.0	3.0	3.5	2.5	4.5	3.0
19	6.5	6.0	4.5	4.5	4.5	4.0	3.5	3.0	3.5	2.5	4.5	3.5
20	6.0	4.0	5.5	4.5	4.0	1.5	3.5	3.0	3.0	2.0	4.0	3.0
21	6.5	4.0	5.0	4.5	4.0	3.5	3.5	3.5	2.5	2.0	4.5	3.0
22	7.0	6.0	5.0	3.0	4.0	3.5	3.5	3.5	2.0	1.5	4.5	3.0
23	6.5	5.5	4.0	3.0	4.0	3.5	3.5	3.0	2.5	1.5	3.5	3.0
24	6.0	5.5	4.5	4.0	4.0	3.5	3.5	3.0	2.5	1.5	4.5	3.0
25	6.0	5.5	4.5	4.0	4.0	3.0	3.5	2.5	3.0	2.0	4.5	3.0
26	6.0	5.5	5.0	4.5	4.0	2.0	3.0	2.5	2.5	2.0	4.5	3.0
27	6.0	4.0	4.5	3.5	4.0	3.5	3.5	3.0	3.5	2.0	3.5	3.0
28	6.0	5.5	4.5	4.0	4.5	4.0	3.5	3.5	3.0	2.5	5.0	3.0
29	6.0	5.5	4.5	4.5	4.5	4.0	3.5	3.0	---	---	4.5	3.0
30	5.5	5.0	4.5	4.0	4.0	3.5	4.0	3.0	---	---	4.5	2.5
31	5.5	5.0	---	---	3.5	3.5	3.5	3.0	---	---	4.5	2.5
MONTH	8.0	4.0	5.5	3.0	5.0	1.5	4.0	2.5	4.0	.5	5.0	1.5

15087610 NAKWASINA RIVER NEAR SITKA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.5	3.0	5.0	3.0	5.0	4.0	6.0	4.5	7.5	7.0	8.0	7.0
2	3.5	3.0	5.0	3.5	4.5	4.0	7.0	5.0	8.0	7.0	8.0	7.5
3	5.0	3.0	5.0	3.5	4.5	4.0	6.0	5.0	8.0	6.5	8.5	7.5
4	4.0	3.5	4.5	1.5	6.0	4.0	6.0	5.0	9.0	6.5	8.5	7.0
5	4.0	3.5	6.0	3.5	5.0	4.0	7.0	5.0	7.5	7.0	8.0	7.0
6	4.5	3.5	5.5	3.0	5.0	4.0	6.0	5.0	7.5	7.0	8.5	7.0
7	4.5	3.5	4.5	3.5	4.5	4.0	6.5	5.5	7.5	6.5	8.5	7.0
8	5.0	3.5	4.5	3.0	5.0	4.0	6.5	5.0	7.5	6.5	8.5	7.0
9	5.0	3.5	5.0	3.0	5.0	4.0	7.0	5.5	8.0	6.5	7.5	7.0
10	5.5	3.5	4.0	3.5	6.0	3.5	6.0	5.5	8.5	6.5	8.0	7.0
11	5.5	3.0	4.5	3.0	5.5	4.0	7.5	5.5	8.5	6.5	7.5	7.0
12	6.0	3.5	5.5	3.0	5.5	4.0	7.0	5.5	9.0	6.5	10.0	7.5
13	5.5	3.5	5.0	3.5	6.0	4.0	7.0	5.5	8.0	7.0	10.5	8.5
14	5.0	3.5	6.0	3.0	5.5	4.5	6.5	5.5	9.0	6.0	9.0	8.5
15	5.0	3.5	6.5	3.0	7.0	4.0	6.5	5.5	8.0	7.0	8.5	8.0
16	5.0	2.0	5.0	3.5	6.5	4.0	6.5	5.5	8.0	7.0	8.0	---
17	6.0	3.0	4.5	3.5	5.0	4.5	7.0	6.0	7.5	7.0	8.5	8.0
18	6.0	3.0	4.5	3.5	5.0	4.5	6.5	4.0	8.5	7.0	8.0	7.5
19	6.0	3.0	4.5	3.5	5.0	4.5	7.0	6.0	8.5	7.0	8.0	7.0
20	6.0	3.0	5.5	3.5	5.0	4.5	7.0	6.5	9.0	7.0	8.0	7.0
21	6.0	3.0	5.5	3.5	6.0	4.5	6.5	6.0	8.5	7.5	8.0	7.0
22	6.0	3.0	6.0	4.0	6.5	4.5	7.0	6.0	9.0	7.0	8.0	7.0
23	5.5	3.5	5.0	4.0	5.5	4.5	7.0	6.0	9.0	7.0	8.0	7.0
24	4.5	3.5	5.0	3.5	5.5	4.5	8.5	5.5	9.0	7.0	8.0	7.0
25	5.5	3.5	5.5	3.5	6.0	4.5	8.5	6.0	9.0	7.0	8.0	7.0
26	5.5	3.5	4.5	3.5	6.0	4.5	7.0	6.5	9.0	7.0	7.5	7.0
27	5.5	3.0	4.5	3.5	6.0	4.5	8.0	6.0	8.0	7.5	8.0	7.0
28	5.5	3.0	4.5	3.5	6.0	5.0	7.5	6.0	8.0	---	8.0	7.0
29	5.5	3.0	4.5	4.0	5.5	4.5	7.5	6.0	8.5	7.5	8.0	7.0
30	5.5	3.0	5.0	4.0	5.0	4.5	7.5	6.5	7.5	7.0	7.5	7.0
31	---	---	5.0	4.0	---	---	7.5	6.5	8.0	---	---	---
MONTH	6.0	2.0	6.5	1.5	7.0	3.5	8.5	4.0	9.0	6.0	10.5	7.0
YEAR	10.5	.5										

15093200 BETTY LAKE OUTLET AT PORT ARMSTRONG

LOCATION.--Lat 56°17'55", long 134°40'50", in NW¼NW¼ sec.29, T.64 S., R.69 E., Hydrologic Unit 19060000, on Baranof Island, in Tongass National Forest, on right bank of outlet to Betty Lake 0.2 mi (0.3 km) upstream from inflow to Jetty Lake and 0.8 mi (1.3 km) northwest of Port Armstrong.

DRAINAGE AREA.--2.66 mi² (6.89 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 306 ft (93.3 m), from topographic map.

REMARKS.--Water-discharge records fair except those for period of no gage-height record, Nov. 2 to Apr. 27, which are poor.

EXTREMES FOR CURRENT PERIOD.--August to September 1978: Maximum discharge during period, 319 ft³/s (9.03 m³/s) Sept. 19, gage height, 10.54 ft (3.213 m); minimum daily, 14 ft³/s (0.40 m³/s) Aug. 28.

Water year 1979: Maximum observed discharge, 328 ft³/s (9.29 m³/s) Oct. 2, gage height, 10.62 ft (9.29 m); minimum daily, 8.3 ft³/s (0.24 m³/s) Feb. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, AUGUST AND SEPTEMBER 1978
MEAN VALUES

DAY	AUG	SEP	DAY	AUG	SEP	DAY	AUG	SEP	DAY	AUG	SEP
1	27	96	9	32	23	17	31	91	25	18	84
2	25	77	10	50	21	18	32	74	26	17	67
3	24	62	11	46	19	19	29	267	27	16	59
4	22	51	12	38	49	20	27	226	28	14	115
5	21	42	13	31	76	21	25	198	29	17	121
6	20	36	14	29	119	22	23	165	30	35	100
7	19	30	15	34	122	23	21	125	31	98	---
8	27	26	16	28	98	24	19	105			

AUGUST TOTAL - 895 MEAN - 29.9 MAX - 98 MIN - 14 CFSM - 10.9 IN. - 12.51 AC-FT - 1780
SEPTEMBER TOTAL - 2744 MEAN - 91.5 MAX - 267 MIN - 19 CFSM - 34.4 IN. - 38.36 AC-FT - 5440

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	131	45	13	23	9.5	19	54	114	48	85	12
2	260	172	105	12	22	35	17	60	136	47	95	14
3	260	105	80	12	22	53	16	100	129	45	83	20
4	174	88	63	11	21	102	15	121	183	44	70	16
5	207	168	50	11	21	89	28	123	201	42	59	16
6	272	130	38	11	19	78	34	113	188	40	51	16
7	233	84	60	10	17	92	60	104	140	42	44	16
8	182	60	112	10	16	83	83	99	123	42	39	16
9	145	44	83	9.7	16	70	50	66	151	45	35	16
10	129	34	63	9.4	15	84	39	95	125	52	31	16
11	108	41	46	9.1	14	77	34	113	104	52	28	17
12	96	33	54	9.0	13	71	33	107	93	50	26	24
13	146	27	74	8.8	13	66	32	97	86	47	24	145
14	128	29	49	8.7	12	60	29	103	80	45	22	72
15	101	30	37	14	12	56	26	83	82	45	21	60
16	85	22	32	25	11	51	25	78	79	49	19	81
17	137	23	28	42	11	47	24	95	73	134	20	95
18	213	19	24	65	11	45	24	98	72	138	21	93
19	159	17	41	44	10	55	25	99	68	135	21	77
20	122	14	37	34	10	72	26	93	63	166	20	62
21	122	12	34	48	9.8	52	27	84	59	187	19	51
22	206	21	31	64	9.5	45	31	98	55	146	18	47
23	171	36	28	33	9.2	41	33	125	53	114	17	50
24	150	72	25	39	9.0	38	35	142	52	91	16	57
25	230	62	23	45	8.9	34	38	169	49	75	15	50
26	164	85	21	50	8.7	32	40	170	47	64	14	44
27	129	120	19	38	8.4	29	43	134	45	54	14	85
28	108	160	16	33	8.3	27	46	113	45	87	13	97
29	91	98	15	29	---	25	50	100	49	42	12	75
30	132	67	14	26	---	22	53	90	49	42	12	91
31	149	---	13	24	---	20	---	88	---	78	11	---
TOTAL	4902	2004	1360	797.7	380.8	1660.5	1035	3214	2793	2288	975	1531
MEAN	158	66.8	43.9	25.7	13.6	53.6	34.5	104	93.1	73.8	31.5	51.0
MAX	272	172	112	65	23	102	83	170	201	187	95	145
MIN	85	12	13	8.7	8.3	9.5	15	54	45	40	11	12
CFSM	59.4	25.1	16.5	9.66	5.11	20.2	13.0	39.1	35.0	27.7	11.8	19.2
IN.	68.53	28.02	19.01	11.15	5.32	23.21	14.47	44.93	39.05	31.99	13.63	21.40
AC-FT	9720	3970	2700	1580	755	3290	2050	6370	5540	4540	1930	3040

WTR YR 1979 TOTAL 22941.0 MEAN 62.9 MAX 272 MIN 8.3 CFSM 23.6 IN 320.71 AC-FT 45500

15093200 BETTY LAKE OUTLET NEAR PORT ARMSTRONG--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 and 1979.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August to November 1978 and June to September 1979.

INSTRUMENTATION.--Temperature recorder since Aug. 17, 1978.

REMARKS.--Interruptions in the record were due to destruction of gage.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 19.5°C Aug. 26, 27; minimum not determined.

TEMPERATURE (DEG. C) OF WATER, AUGUST TO SEPTEMBER 1978

DAY	MAX	MIN	DAY	MAX	MIN	MAX	MIN	DAY	MAX	MIN	MAX	MIN
	SEPTEMBER			AUGUST		SEPTEMBER			AUGUST		SEPTEMBER	
1	14.5	14.5	12	---	---	14.0	13.5	23	15.5	15.0	11.0	11.0
2	14.5	14.5	13	---	---	13.5	13.5	24	17.5	15.0	11.0	11.0
3	14.5	14.0	14	---	---	13.5	13.0	25	16.5	15.5	11.5	11.0
4	15.5	14.0	15	---	---	13.0	12.5	26	16.0	15.0	12.0	10.5
5	15.5	14.5	16	---	---	13.0	12.5	27	16.5	15.5	11.0	10.5
6	15.0	14.5	17	15.0	15.0	13.0	12.5	28	16.0	15.5	10.5	10.5
7	14.5	14.5	18	15.5	15.0	12.5	12.0	29	16.0	15.5	10.5	10.5
8	14.5	14.0	19	15.5	15.0	12.0	11.5	30	15.5	15.0	11.0	10.5
9	14.5	14.0	20	15.5	15.0	11.5	11.0	31	15.0	14.5	---	---
10	14.5	14.0	21	15.5	15.0	11.5	11.0					
11	14.5	14.0	22	16.0	14.5	11.0	11.0	MONTH	17.5	14.5	15.5	10.5

TEMPERATURE, WATER (DEG. C), OCTOBER TO NOVEMBER 1978 AND JUNE TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	DAY	MAX	MIN	DAY	MAX	MIN	DAY	MAX	MIN
	OCTOBER		NOVEMBER			OCTOBER			OCTOBER			OCTOBER	
1	10.5	10.5	7.5	7.0	9	9.5	9.0	17	8.5	8.5	25	8.0	8.0
2	10.5	10.0	---	---	10	9.5	9.0	18	8.5	8.5	26	8.0	7.5
3	10.0	10.0	---	---	11	10.0	9.0	19	8.5	8.5	27	8.0	7.5
4	10.0	9.5	---	---	12	9.0	8.5	20	8.5	8.5	28	8.0	7.5
5	9.5	9.5	---	---	13	8.5	8.5	21	8.5	8.0	29	7.5	7.5
6	9.5	9.0	---	---	14	8.5	8.5	22	8.0	8.0	30	7.5	7.5
7	9.5	9.5	---	---	15	8.5	8.5	23	8.0	8.0	31	7.5	7.5
8	9.5	9.5	---	---	16	8.5	8.5	24	8.0	8.0			
											MONTH	10.5	7.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1					---	---	13.0	11.0	13.5	13.5	17.0	16.0
2					---	---	12.0	11.0	14.0	13.5	16.5	16.0
3					---	---	12.5	11.5	15.0	13.5	16.5	16.0
4					---	---	13.0	12.0	16.0	14.5	16.5	15.5
5					---	---	14.0	12.5	16.0	15.0	15.5	15.0
6					---	---	13.5	12.5	15.5	15.0	15.0	15.0
7					---	---	12.5	11.5	15.5	15.0	15.5	14.5
8					6.5	6.0	13.0	12.0	16.0	14.5	15.0	14.5
9					7.0	6.0	13.0	12.5	16.5	15.0	15.0	14.5
10					8.5	6.5	13.0	12.5	16.5	15.0	15.0	14.5
11					9.5	7.5	12.5	12.0	16.5	15.5	14.5	14.5
12					8.5	7.0	13.0	12.5	17.5	16.5	14.5	14.0
13					8.5	7.0	13.0	12.5	18.5	16.5	14.0	13.5
14					8.0	7.0	13.0	13.0	18.0	16.5	14.0	13.5
15					8.0	7.5	14.0	13.0	17.0	16.5	14.0	14.0
16					10.0	8.0	13.5	13.5	16.5	16.5	14.0	13.5
17					9.5	8.5	13.5	12.0	16.5	16.0	13.5	13.5
18					9.5	8.5	12.5	12.0	17.5	16.0	---	---
19					11.0	8.5	12.5	12.5	18.0	16.5	---	---
20					10.0	9.0	12.5	11.5	18.0	17.0	---	---
21					10.0	9.0	12.5	11.5	19.0	17.0	---	---
22					10.5	9.0	12.0	12.0	18.0	17.0	---	---
23					13.5	10.5	14.0	12.0	18.5	17.0	---	---
24					12.0	11.5	13.5	13.0	18.5	17.5	---	---
25					12.5	11.0	15.5	13.5	19.0	18.0	---	---
26					13.0	11.5	15.0	14.0	19.5	18.0	---	---
27					12.5	11.0	14.0	13.5	19.5	18.0	---	---
28					11.0	10.5	14.0	13.5	19.0	18.0	---	---
29					12.0	11.0	14.5	14.0	18.5	17.5	---	---
30					11.5	11.0	14.5	13.5	18.0	17.5	---	---
31					---	---	14.0	13.5	17.5	17.0	---	---
MONTH					13.5	6.0	15.5	11.0	19.5	13.5	17.0	

15093400 SASHIN CREEK NEAR BIG PORT WALTER

LOCATION.--Lat 56°22'32", long 134°39'40", in NW¼SW¼ sec.28, T.63 S., R.69 E., Greater Sitka Borough, Hydrologic Unit 19060000, on Baranof Island, in Tongass National Forest, on right bank 0.7 mi (1.1 km) upstream from mouth at Little Port Walter, 1 mi (1.6 km) downstream from Sashin Lake, and 2.6 mi (4.2 km) east of Big Port Walter.

DRAINAGE AREA.--3.72 mi² (9.63 km²).

PERIOD OF RECORD.--July 1965 to September 1973 and October 1974 to current year.

REVISED RECORDS.--WSP 2136: Drainage area. WRD Alaska 1972: 1971 (M).

GAGE.--Water-stage recorder. Altitude of gage is 100 ft (30 m), from topographic map.

REMARKS.--Water-discharge records good except those for period of no gage-height record, Dec. 29 to Feb. 2, which are poor.

AVERAGE DISCHARGE.--13 years, 81.5 ft³/s (2.308 m³/s), 297.52 in/yr (7,557 mm/yr), 59,050 acre-ft/yr (72.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,650 ft³/s (75.1 m³/s) Nov. 2, 1976, gage height, 5.30 ft (1.615 m), from rating curve extended above 760 ft³/s (21.5 m³/s) on basis of slope-area measurement of peak flow at gage height of 4.5 ft (1.37 m) from floodmarks; maximum gage height, 5.35 ft (1.631 m) Mar. 12, 1971, backwater from ice; minimum discharge, 0.75 ft³/s (0.021 m³/s) Jan. 30, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s (19.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 2	1630	1,170	33.1	4.42	1.347	Oct. 22	0030	*1,490	42.2	*4.65	1.417
Oct. 8	0330	827	23.4	4.11	1.253	Oct. 30	2030	751	21.3	4.03	1.228
Oct. 18	0330	715	20.2	3.99	1.216	Nov. 27	0115	918	26.0	4.20	1.280

Minimum daily discharge, 4.3 ft³/s (0.12 m³/s) Aug. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	306	95	16	31	12	27	67	154	24	85	26
2	603	236	263	16	30	71	26	87	112	24	89	32
3	269	138	165	15	30	143	23	215	126	22	57	19
4	159	114	93	14	31	264	22	192	278	21	45	25
5	206	240	77	14	26	202	42	183	236	21	37	16
6	416	163	59	13	24	272	46	124	178	19	31	14
7	353	111	179	13	23	295	101	105	151	27	27	12
8	475	78	726	13	23	135	104	87	87	23	23	11
9	224	57	524	13	22	156	93	78	140	42	20	10
10	131	47	247	12	20	120	48	172	80	41	17	9.4
11	103	54	78	12	19	109	45	149	64	35	15	34
12	91	46	85	12	18	123	45	97	57	30	13	145
13	274	37	281	12	17	123	45	101	51	27	12	249
14	101	40	105	12	17	90	41	76	55	27	10	112
15	144	37	75	17	16	75	36	64	58	26	9.8	74
16	102	31	57	36	16	64	33	83	49	49	9.1	129
17	431	31	44	60	15	62	33	91	45	180	11	201
18	600	26	38	91	15	72	33	82	41	76	10	160
19	210	20	58	68	14	76	34	73	40	133	9.0	54
20	154	19	79	50	14	105	34	65	36	193	8.2	40
21	345	17	47	61	14	76	35	56	33	245	7.5	33
22	698	51	44	77	13	60	39	131	32	117	6.6	29
23	270	83	39	96	13	53	47	143	31	75	5.7	61
24	279	98	37	48	12	50	50	208	30	54	5.5	31
25	481	81	31	63	13	46	53	281	29	43	5.2	27
26	202	350	28	70	12	45	53	196	27	35	5.0	31
27	128	917	25	52	12	37	59	118	26	30	5.0	183
28	95	774	23	44	11	37	66	92	27	26	4.7	66
29	86	233	21	38	---	33	72	72	28	22	4.6	66
30	517	135	19	34	---	31	69	63	26	58	4.4	184
31	491	---	17	32	---	28	---	79	---	128	4.3	---
TOTAL	8719	4570	3659	1124	521	3064	1454	3630	2326	1873	596.6	2083.4
MEAN	281	152	118	36.3	18.6	98.8	48.5	117	77.5	60.4	19.2	69.4
MAX	698	917	726	96	31	295	104	281	278	245	89	249
MIN	81	17	17	12	11	12	22	56	26	19	4.3	9.4
CFSM	75.5	40.9	31.7	9.76	5.00	26.6	13.0	31.5	20.8	16.2	5.16	18.7
IN.	87.17	45.69	36.58	11.24	5.21	30.63	14.54	36.29	23.25	18.72	5.96	20.83
AC-FT	17290	9060	7260	2230	1030	6080	2880	7200	4610	3720	1180	4130

CAL YR 1978 TOTAL 32566.3 MEAN 89.2 MAX 917 MIN 6.0 CFSM 24.0 IN 325.58 AC-FT 64600
WTR YR 1979 TOTAL 33620.0 MEAN 92.1 MAX 917 MIN 4.3 CFSM 24.8 IN 336.11 AC-FT 66690

15101200 KALININ BAY TRIBUTARY NEAR SITKA

LOCATION.--Lat 57°18'14", long 135°46'35", in SE¼NW¼ sec.6, T.53 S., R.61 E., Greater Sitka Borough, Hydrologic Unit 19060000, on Kruzof Island, in Tongass National Forest , on right bank 0.25 mi (0.4 km) upstream from mouth at Kalinin Bay and 25 mi (40 km) northwest of Sitka.

DRAINAGE AREA.--2.28 mi² (5.91 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 25 ft (7.6 m), from topographic map.

REMARKS.--Water-discharge records good except those for Jan. 1 to Mar. 16, which are poor. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 802 ft³/s (22.7 m³/s), revised, Sept. 15, 1976, gage height, 4.24 ft (1.292 m) from rating curve extended above 450 ft³/s (12.7 m³/s) on basis of slope-area measurement at gage height 4.5 ft (1.372 m) for flood of Oct. 9, 1979; minimum daily, 1.4 ft³/s (0.04 m³/s) Aug. 6, 7, 1977 and Sept. 10, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 544 ft³/s (15.4 m³/s) Oct. 24, gage height, 3.70 ft (1.128 m); minimum daily, 2.4 ft³/s (0.07 m³/s) Aug. 27.

REVISIONS.--The maximum discharges for some water years have been revised, as shown in the following table. They supersede figures published in the reports for 1977 and 1978.

Water year	Date	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Water year	Date	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
1976a	Sept.15, 1976	802	22.7	4.24	1.292	1978	Oct. 14, 1977	499	14.1	3.59	1.094
1977	Nov. 2, 1976	579	16.4	3.78	1.152						

a Maximum discharge for water year may have been higher prior to installation of gage.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	51	17	3.6	4.7	3.4	5.1	11	27	10	111	3.6
2	65	33	94	3.3	4.8	3.6	4.7	12	26	7.7	56	8.6
3	27	36	16	3.2	4.9	10	4.5	16	20	6.6	16	8.2
4	17	28	8.8	3.1	5.3	29	5.5	29	20	6.6	9.7	5.5
5	21	68	14	3.0	6.2	26	22	23	17	6.2	7.4	4.9
6	196	27	16	2.9	7.4	24	14	15	21	45	11	4.9
7	55	14	203	2.9	6.2	22	29	12	16	104	9.0	3.4
8	31	8.7	55	3.0	5.2	21	20	12	15	18	6.7	3.4
9	66	5.8	34	3.1	4.9	19	18	9.2	18	12	5.7	2.9
10	43	4.5	18	3.2	4.6	18	14	50	13	10	5.2	2.5
11	24	14	11	3.3	4.3	16	10	47	9.9	8.8	4.6	4.7
12	18	6.1	23	3.4	4.0	17	9.0	23	8.4	7.0	4.3	42
13	51	6.2	64	4.0	3.9	18	8.4	17	7.3	6.0	3.9	92
14	29	15	25	5.6	4.0	16	7.5	13	8.7	6.2	3.8	29
15	61	6.9	12	6.5	4.1	14	6.0	9.9	8.5	7.8	3.6	14
16	14	5.0	8.2	8.6	4.1	13	6.2	15	7.1	18	3.6	12
17	175	6.7	6.0	10	4.0	12	6.2	27	6.4	165	18	21
18	245	3.9	11	12	3.7	11	6.0	24	14	29	26	11
19	30	3.9	55	8.0	3.5	21	6.0	28	9.4	40	8.8	6.5
20	45	3.7	30	5.8	3.4	63	6.8	22	7.4	58	6.0	5.1
21	25	3.0	11	5.0	3.3	21	8.1	13	6.3	20	11	4.8
22	73	61	7.9	4.7	3.2	15	11	11	5.8	19	9.4	4.1
23	44	42	12	4.8	3.1	18	12	20	5.5	13	5.6	26
24	211	33	9.4	5.1	3.0	24	12	17	5.4	9.5	4.3	14
25	208	29	6.6	6.0	3.1	14	16	20	5.1	7.4	3.4	32
26	29	108	5.4	7.7	3.1	10	14	16	5.1	6.6	2.8	13
27	33	106	5.5	6.3	3.2	7.6	15	12	4.9	6.2	2.4	31
28	17	16	4.3	6.0	3.3	8.9	17	10	43	5.3	2.6	20
29	30	11	4.1	5.2	---	6.9	14	9.3	30	4.9	3.0	10
30	112	7.7	4.0	4.7	---	5.2	12	8.6	15	5.4	3.0	20
31	34	---	3.8	4.9	---	5.4	---	9.5	---	22	3.1	---
TOTAL	2047	764.1	795.0	158.9	118.5	513.0	340.0	561.5	406.2	691.2	370.9	460.1
MEAN	66.0	25.5	25.6	5.13	4.23	16.5	11.3	18.1	13.5	22.3	12.0	15.3
MAX	245	108	203	12	7.4	63	29	50	43	165	111	92
MIN	14	3.0	3.8	2.9	3.0	3.4	4.5	8.6	4.9	4.9	2.4	2.5
CFSM	28.9	11.2	11.2	2.25	1.86	7.24	4.96	7.94	5.92	9.78	5.26	6.71
IN.	33.38	12.46	12.97	2.59	1.93	8.37	5.54	9.16	6.62	11.27	6.05	7.50
AC-FT	4060	1520	1580	315	235	1020	674	1110	806	1370	736	913

CAL YR 1978 TOTAL 7207.9 MEAN 19.7 MAX 245 MIN 1.4 CFSM 8.64 IN 117.55 AC-FT 14300
WTR YR 1979 TOTAL 7226.4 MEAN 19.8 MAX 245 MIN 2.4 CFSM 8.68 IN 117.85 AC-FT 14330

15101200 KALININ BAY TRIBUTARY NEAR SITKA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: September 1976 to September 1978 and June to September 1979.

INSTRUMENTATION.--Temperature recorder since Sept. 1, 1976.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 14.0°C July 26-28, Aug. 3, 5, 1977; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 13.0°C Aug. 12, 14, and 16; minimum not determined.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
NOV									
28...	1230	21	35	7.7	4.5	--	8	--	2.5
JAN									
30...	1400	5.1	75	7.8	.0	13.4	17	--	6.0
JUN									
07...	1100	15	36	7.7	6.5	--	10	0	3.2
SEP									
16...	1300	8.5	44	--	9.5	--	14	--	4.6

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
NOV									
28...	.4	2.5	.3	--	3.9	4.5	.0	3.6	--
JAN									
30...	.6	4.5	.6	--	3.3	15	.0	6.4	--
JUN									
07...	.4	2.7	.3	12	5.2	3.9	.1	3.9	26
SEP									
16...	.6	3.0	.3	--	11	3.4	.0	5.4	29

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV									
28...	.06	.00	.23	.23	--	.020	0	.00	--
JAN									
30...	--	--	--	--	--	--	3	.04	63
JUN									
07...	--	--	--	--	--	--	--	--	--
SEP									
16...	.11	.25	.17	.42	.53	.020	6	.14	--

15101200 KALININ BAY TRIBUTARY NEAR SITKA--Continued

TEMPERATURE, WATER (DEG. C), JUNE TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1					---	---	9.0	7.5	10.5	10.0	11.5	10.0
2					---	---	11.5	8.0	10.5	9.5	11.0	10.0
3					---	---	10.5	9.0	11.0	9.0	11.0	10.0
4					---	---	9.5	9.0	12.0	9.5	11.0	9.5
5					---	---	10.0	8.5	11.0	10.0	10.5	8.5
6					---	---	10.0	8.5	12.0	10.0	10.5	8.5
7					7.0	6.5	9.0	8.5	11.0	10.0	11.0	8.5
8					7.0	6.0	10.0	8.0	11.0	9.5	11.0	9.0
9					7.5	6.5	10.0	8.0	12.0	9.0	10.5	9.0
10					9.5	5.0	10.0	9.0	12.0	8.5	11.0	9.5
11					10.0	6.5	10.5	9.0	12.5	9.0	10.5	10.0
12					8.5	7.0	10.5	8.5	13.0	10.0	11.5	10.0
13					8.0	7.0	10.5	9.0	12.0	10.5	11.0	10.5
14					8.0	7.0	10.5	9.0	13.0	9.5	11.0	10.5
15					10.5	6.5	10.5	9.0	12.5	11.0	10.5	9.5
16					10.5	8.0	10.0	8.5	13.0	11.0	10.5	9.5
17					9.0	8.0	10.5	9.5	12.0	11.0	10.0	9.5
18					8.5	7.5	9.5	9.0	11.5	10.5	9.5	8.5
19					9.0	7.0	10.0	9.0	12.0	10.5	9.0	7.5
20					9.0	7.5	10.0	9.5	11.5	10.5	9.0	7.0
21					9.5	7.5	9.5	9.0	11.5	10.5	9.5	8.0
22					11.0	7.5	10.0	9.0	12.5	10.5	10.0	8.0
23					10.0	8.5	10.5	9.0	12.5	9.5	10.0	9.0
24					10.0	8.5	12.0	8.5	12.5	9.5	10.0	9.0
25					11.0	8.5	12.0	9.0	12.0	9.0	9.5	8.5
26					10.0	8.5	11.0	10.0	12.0	10.5	9.0	8.0
27					10.0	8.5	12.5	9.5	12.0	11.0	9.0	8.5
28					9.0	7.5	11.5	10.0	11.5	11.0	9.0	8.0
29					9.0	7.5	12.0	10.0	12.0	10.5	9.0	7.5
30					8.5	7.0	11.5	10.5	11.5	10.5	9.0	7.5
31					---	---	11.0	10.5	11.0	9.0	---	---
MONTH					11.0		12.5	7.5	13.0	8.5	11.5	7.0

15101500 GREENS CREEK NEAR JUNEAU

LOCATION.--Lat 58°05'18", long 134°44'49", in SE¼ sec.11, T.44 S., R.65 E., Hydrologic Unit 19060000, on Admiralty Island, in Tongass National Forest, on left bank 1 mi (1.6 km) upstream from mouth at Hawk Inlet, and 19 mi (31 km) southwest of Juneau.

DRAINAGE AREA.--22.8 mi² (59.1 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1978 to September 1979.

GAGE.--Water-stage recorder. Altitude of gage is 50 ft (15 m), from topographic map.

REMARKS.--Records fair except those for Dec. 26 to Mar. 10, which are poor.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,640 ft³/s (74.8 m³/s) Oct. 30, gage height, 15.12 ft (4.609 m), minimum daily, 8.9 ft³/s (0.25 m³/s) Feb. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	318	98	33	29	12	28	227	345	143	105	31
2	230	278	88	32	30	13	28	206	372	162	110	33
3	520	246	84	30	29	14	26	266	286	163	92	35
4	300	177	112	28	28	16	25	275	272	175	75	35
5	230	163	127	26	27	30	31	245	258	154	67	23
6	760	240	102	24	22	60	37	220	284	180	65	23
7	840	174	86	21	18	100	36	176	217	296	67	21
8	380	138	79	18	15	110	44	152	188	198	60	19
9	450	118	81	16	13	100	52	126	180	171	62	18
10	500	110	78	15	10	80	48	120	179	158	55	20
11	940	104	72	15	9.4	67	41	130	166	158	50	22
12	830	97	81	15	9.0	54	39	118	159	130	48	45
13	660	93	141	16	9.0	45	41	109	154	122	45	139
14	400	88	118	17	8.9	45	40	103	169	126	43	74
15	580	129	67	18	9.0	48	38	103	169	130	42	58
16	370	188	63	19	9.1	38	37	111	160	130	40	44
17	220	148	66	22	9.2	35	37	118	158	222	37	50
18	1140	114	100	25	9.3	35	37	115	169	294	37	47
19	468	89	62	29	9.5	41	40	118	175	498	37	39
20	256	89	55	31	9.6	64	46	135	157	298	32	35
21	206	98	47	32	9.8	63	51	130	143	216	31	32
22	228	104	43	33	9.9	53	74	137	136	171	31	34
23	434	129	41	33	10	49	109	198	134	148	28	59
24	225	250	40	32	10	55	99	206	131	127	26	68
25	429	209	40	31	11	48	93	216	134	116	26	85
26	225	134	40	29	11	41	61	258	136	106	23	69
27	171	106	39	28	11	38	131	265	135	98	23	117
28	143	93	38	28	12	35	187	186	158	89	21	105
29	125	194	37	28	---	32	246	172	228	83	28	72
30	2060	129	36	28	---	38	246	173	185	73	30	83
31	1760	---	35	29	---	43	---	192	---	96	32	---
TOTAL	16190	4547	2196	781	397.7	1502	2048	5306	5737	5231	1468	1535
MEAN	522	152	70.8	25.2	14.2	48.5	68.3	171	191	169	47.4	51.2
MAX	2060	318	141	33	30	110	246	275	372	498	110	139
MIN	110	88	35	15	8.9	12	25	103	131	73	21	18
CFSM	22.9	6.66	3.10	1.10	.62	2.13	2.99	7.49	8.37	7.41	2.08	2.24
IN.	26.39	7.41	3.58	1.27	.65	2.45	3.34	8.65	9.35	8.53	2.39	2.50
AC-FT	32110	9020	4360	1550	789	2980	4060	10520	11380	10380	2910	3040

WTR YR 1979 TOTAL 46938.7 MEAN 129 MAX 2060 MIN 8.9 CFSM 5.65 IN 76.51 AC-FT 93100

15101500 GREENS CREEK NEAR JUNEAU--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 and 1979.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1978 to September 1979.
WATER TEMPERATURES: December 1978 to September 1979.

INSTRUMENTATION.--Water quality mini-monitor since Dec. 31, 1978 in conjunction with satellite telemeter.

REMARKS.--Records fair.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum observed during period January to September, 277 micromhos/cm Jan. 31 and Feb. 1-2; minimum, 64 micromhos/cm Apr. 28.
WATER TEMPERATURES: Maximum observed, 12.5°C Aug. 18, 19, 22, and 23; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT											
18...	1600	1570	200	--	7.5	195	--	--	--	--	--
NOV											
09...	1330	82	140	--	1.0	--	--	64	--	20	3.5
FEB											
28...	1200	12	200	7.9	.0	--	--	85	19	26	4.9
MAY											
01...	1400	207	132	7.5	3.0	--	--	--	--	--	--
JUN											
04...	1400	279	102	7.6	5.5	--	--	--	--	--	--
JUL											
16...	1600	82	128	7.9	--	--	--	--	--	--	--
AUG											
16...	1630	40	161	7.5	12.0	--	9.0	77	11	24	4.1

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)
OCT										
18...	--	--	--	--	--	--	--	--	--	--
NOV										
09...	1.7	.1	--	16	1.6	.0	4.3	--	.20	--
FEB										
28...	2.4	.1	--	26	1.8	.0	4.7	106	.18	--
MAY										
01...	--	--	--	--	--	--	--	--	--	--
JUN										
04...	--	--	--	--	--	--	--	--	--	--
JUL										
16...	--	--	56	--	--	--	--	--	--	--
AUG										
16...	2.1	.3	80	22	1.2	.1	5.3	102	.62	30

DATE	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
OCT										
18...	--	--	--	--	--	--	--	--	--	--
NOV										
09...	1	0	--	0	6	350	--	50	--	20
FEB										
28...	0	0	--	0	5	30	--	30	--	0
MAY										
01...	0	0	--	10	6	390	--	--	--	20
JUN										
04...	0	0	--	10	10	220	--	--	--	20
JUL										
16...	1	0	0	0	10	90	--	--	11	10
AUG										
16...	1	100	0	0	2	420	230	190	4	20

15101500 GREENS CREEK NEAR JUNEAU--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT										
18...	--	--	--	--	--	--	--	1010	4280	--
NOV										
09...	--	4	.5	--	0	0	20	6	1.3	--
FEB										
28...	--	0	.1	--	1	0	20	1	.03	--
MAY										
01...	--	--	.2	--	1	0	20	15	8.4	--
JUN										
04...	--	--	.2	--	1	0	40	11	8.3	--
JUL										
16...	--	--	.1	--	1	0	30	--	--	--
AUG										
16...	10	6	.2	0	1	0	0	11	1.2	39

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), DECEMBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1					---		195	191	277	---	203	201
2					---		223	191	277	---	202	199
3					---		195	191	---	---	200	196
4					---		---	---	---	---	196	184
5					---		---	---	---	---	185	163
6					---		199	199	---	---	163	150
7					---		199	199	---	---	149	125
8					---		203	199	203	199	135	124
9					---		203	199	203	199	140	104
10					---		203	---	---	---	122	103
11					---		203	---	---	---	132	122
12					---		203	203	---	---	133	129
13					---		207	203	---	---	130	126
14					---		207	207	---	---	131	126
15					---		211	207	---	---	143	123
16					---		207	203	---	---	134	128
17					---		---	---	---	---	136	134
18					---		---	---	---	---	136	132
19					---		---	---	---	---	133	126
20					---		---	---	---	---	127	108
21					---		---	---	---	---	113	108
22					---		---	---	---	---	118	113
23					---		---	---	---	---	120	117
24					---		---	---	---	---	117	111
25					---		---	---	---	---	121	114
26					---		---	---	---	---	124	120
27					---		---	---	---	---	127	124
28					---		---	---	---	---	129	126
29					---		---	---	---	---	133	129
30					---		---	---	---	---	137	132
31					195		277	---	---	---	138	134
MONTH											203	103

15101500 GREENS CREEK NEAR JUNEAU--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), DECEMBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	176	133	131	99	98	87	116	110	128	118	206	187
2	139	136	105	99	96	88	116	111	124	115	189	182
3	139	137	99	88	102	95	112	109	130	120	194	---
4	139	135	97	88	103	101	112	109	136	129	---	---
5	134	115	101	95	105	102	116	110	141	135	188	185
6	116	110	105	94	105	101	116	111	152	139	189	186
7	117	110	111	103	107	103	111	106	195	139	192	189
8	110	100	115	109	109	105	110	106	145	143	194	191
9	100	92	122	114	110	108	112	109	148	144	196	193
10	100	93	123	114	114	108	114	111	152	148	196	193
11	105	100	118	113	117	112	116	112	154	151	193	186
12	108	104	122	116	119	116	120	116	157	154	187	141
13	107	104	124	120	121	117	122	119	159	156	139	107
14	108	105	129	123	121	116	124	121	162	159	139	126
15	109	106	129	125	119	114	123	120	163	161	140	128
16	128	105	124	120	120	115	124	120	166	163	146	139
17	110	105	122	118	119	117	119	112	168	165	146	138
18	109	106	121	118	119	115	112	111	170	167	145	139
19	108	104	122	112	116	113	---	---	172	169	149	144
20	105	100	117	110	118	115	---	---	174	170	154	150
21	100	95	116	112	121	117	---	---	175	171	156	154
22	95	78	115	109	123	120	---	---	176	171	157	154
23	78	71	109	99	123	120	---	---	182	174	156	129
24	80	70	102	99	124	121	---	---	183	181	139	127
25	83	79	101	96	124	121	---	---	184	182	139	118
26	85	78	98	94	123	120	---	---	189	183	134	127
27	78	66	99	91	122	119	---	---	193	187	126	112
28	100	64	105	99	122	113	---	---	195	189	124	112
29	103	98	106	104	113	107	---	---	198	188	134	125
30	107	100	105	103	111	105	---	---	196	182	136	116
31	---	---	104	98	---	---	---	---	187	181	---	---
MONTH	176	64	131	88	124	87			198	115	206	107

15101500 GREENS CREEK NEAR JUNEAU--Continued

TEMPERATURE, WATER (DEG. C), DECEMBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1						---	1.0	1.0	---	1.0	.0	.0
2						---	1.0	1.0	---	1.0	.0	.0
3						---	1.0	1.0	---	---	.0	.0
4						---	---	1.0	---	1.0	.0	.0
5						---	---	.0	1.0	.0	.0	.0
6						---	1.0	.0	---	.0	.0	.0
7						---	1.0	.0	---	.0	.0	.0
8						---	1.0	.0	.0	.0	.0	.0
9						---	1.0	.0	.0	.0	.0	.0
10						---	---	.0	---	---	.0	.0
11						---	---	.0	---	---	.0	.0
12						---	1.0	.0	---	---	.5	.0
13						---	1.0	.0	---	---	.5	.5
14						---	1.0	.0	---	---	1.0	.0
15						---	1.0	.0	---	---	1.0	.0
16						---	1.0	1.0	---	---	1.0	1.0
17						---	---	---	---	---	1.0	1.0
18						---	---	---	---	---	1.5	1.0
19						---	---	---	---	.0	1.0	.5
20						---	---	---	---	---	1.0	.0
21						---	---	1.0	---	---	1.0	.0
22						---	---	---	---	---	1.5	1.0
23						---	---	---	---	---	1.0	1.0
24						---	---	---	---	---	1.5	.5
25						---	---	---	---	---	1.5	.5
26						---	---	---	---	---	1.0	.5
27						---	---	---	---	---	1.0	.5
28						---	---	---	---	.0	1.5	.5
29						---	---	---	---	---	1.0	.0
30						---	---	---	---	---	.0	.0
31						1.0	---	1.0	---	---	.0	.0
MONTH								.0		.0	1.5	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1.0	.0	4.0	2.0	5.5	4.5	8.0	6.5	10.5	9.5	11.0	9.5
2	.5	.0	4.5	2.5	6.0	4.5	9.0	6.0	11.0	9.5	11.0	9.5
3	1.0	.5	3.5	2.5	5.5	4.5	8.0	7.0	11.0	9.5	10.5	8.5
4	1.5	1.0	3.5	2.5	6.0	4.5	8.5	7.0	11.5	9.5	---	---
5	1.5	.0	4.5	2.5	6.5	4.5	9.5	7.0	11.0	10.0	10.0	10.0
6	1.5	1.0	4.5	2.5	6.0	4.5	8.5	7.5	11.5	10.0	10.5	9.0
7	1.5	1.0	4.5	3.0	6.5	4.5	8.5	7.0	11.0	9.5	10.0	8.5
8	2.0	.5	4.5	3.0	6.0	4.5	9.0	7.0	11.5	10.0	10.0	8.5
9	2.0	.5	4.0	2.0	6.0	5.0	9.0	7.5	11.0	9.5	10.0	8.0
10	2.0	1.0	4.0	3.0	7.5	5.0	10.5	8.0	11.0	9.0	10.5	9.5
11	2.0	1.0	4.0	3.0	7.5	5.0	10.5	8.5	11.5	9.0	10.0	9.5
12	2.0	1.0	5.0	3.0	7.0	5.5	9.5	8.5	11.5	9.5	10.0	9.5
13	2.0	.5	4.5	3.0	7.5	5.0	9.5	8.0	12.0	10.0	10.5	10.0
14	2.5	1.0	5.0	2.5	6.5	5.5	9.5	8.5	12.0	10.0	10.5	10.0
15	2.0	1.0	5.5	2.5	8.5	5.0	9.5	8.0	12.0	10.5	10.5	10.0
16	2.5	1.0	5.0	3.0	8.5	5.0	9.0	8.0	11.5	10.5	10.0	9.0
17	2.5	1.0	4.5	3.5	7.0	6.0	10.0	8.5	12.0	10.5	10.0	9.0
18	2.5	.5	5.0	3.5	7.5	6.0	9.5	9.0	12.5	11.0	9.5	8.5
19	2.5	.5	5.0	3.5	8.0	5.5	---	---	12.5	11.0	9.0	8.0
20	2.5	1.0	5.5	3.5	7.5	6.0	---	---	12.0	10.0	8.0	7.5
21	2.5	1.0	5.5	4.0	7.5	6.0	---	---	12.0	10.5	8.5	7.5
22	2.5	.0	6.0	4.0	9.0	6.0	---	---	12.5	11.0	9.0	8.0
23	2.5	.0	5.5	4.0	7.5	5.5	---	---	12.5	10.5	9.0	8.5
24	2.5	.5	5.5	3.5	8.0	6.0	---	---	12.0	10.0	9.0	8.5
25	3.0	1.5	5.5	4.0	8.0	6.5	---	---	12.0	10.0	8.5	8.0
26	3.5	1.5	4.5	4.0	9.0	6.0	---	---	11.5	10.0	8.0	7.0
27	3.5	1.0	5.5	3.5	8.0	6.5	---	---	11.5	10.5	8.5	7.5
28	3.0	1.0	5.0	4.0	7.5	6.5	---	---	11.5	10.5	8.5	7.5
29	3.5	1.5	5.5	4.0	7.0	6.0	---	---	11.5	10.0	8.0	7.0
30	4.0	2.0	5.5	4.0	7.5	6.0	---	---	10.5	10.0	8.0	6.5
31	---	---	6.0	4.5	---	---	---	---	10.5	9.5	---	---
MONTH	4.0	.0	6.0	2.0	9.0	4.5			12.5	9.0	11.0	6.5
YEAR	12.5	.0										

15106100 BLACK RIVER NEAR PELICAN

LOCATION.--Lat 57°42'19", long 136°05'34", in NW¼SW¼ sec.18, T.48 S., R.58 E., Greater Sitka Borough, Hydrologic Unit 19060000, on Chichagof Island, in Tongass National Forest, on right bank 1.2 mi (2.0 km) upstream from mouth at Black Bay, and 23 mi (37 km) southeast of Pelican.

DRAINAGE AREA.--24.7 mi² (64.0 km²).

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 30 ft (9.1 m), from topographic map.

REMARKS.--Records fair except those for Dec. 18, 1978 to Mar. 18, 1979, which are poor.

EXTREMES FOR CURRENT PERIOD.--Water year 1978: Maximum discharge, 5,490 ft³/s (155 m³/s) Oct. 14, gage height, 11.70 ft (3.566 m), from rating curve extended above 450 ft³/s (12.7 m³/s) on basis of slope-area measurement at gage height 11.80 ft (3.597 m), for flood of Oct. 10, 1979; minimum daily, 9.0 ft³/s (0.25 m³/s) Dec. 7.

Water year 1979: Maximum discharge, 3,920 ft³/s (111 m³/s) Oct. 18, gage height, 10.33 ft (3.149 m³/s), from rating curve extended as explained above; minimum daily, 9.4 ft³/s (0.27 m³/s) Feb. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	258	228	118	71	139	79	174	546	918	292	71	99
2	209	176	101	73	112	88	171	946	404	515	68	78
3	150	178	72	63	63	68	148	445	319	627	63	66
4	86	270	22	57	60	61	135	393	261	314	61	61
5	84	197	18	27	112	59	130	289	234	174	63	57
6	82	197	19	62	481	61	164	249	221	140	59	53
7	723	180	9.0	63	296	124	356	389	209	118	60	51
8	274	157	12	46	249	228	270	375	186	103	120	50
9	138	140	29	57	180	217	308	279	160	94	141	47
10	251	126	80	97	148	174	586	273	145	87	243	45
11	552	126	75	120	118	127	272	302	140	84	147	66
12	675	148	70	100	110	103	241	361	135	91	97	72
13	696	186	63	81	86	97	195	339	134	120	92	71
14	2330	293	69	71	79	95	169	272	184	134	152	357
15	2540	215	70	64	99	94	150	275	129	307	138	290
16	3050	160	59	58	104	140	138	279	246	165	100	324
17	2070	135	56	62	114	134	145	304	512	114	276	140
18	652	118	55	60	169	127	184	485	232	92	152	108
19	348	113	53	62	699	239	207	449	217	82	104	1320
20	288	103	54	69	477	232	255	340	275	85	125	615
21	351	100	55	132	219	187	339	275	186	86	280	277
22	732	96	60	104	291	130	328	295	143	148	134	184
23	369	84	60	177	184	103	243	271	132	171	101	126
24	310	76	60	904	137	101	232	245	142	174	97	101
25	215	76	92	546	113	108	268	293	130	249	75	88
26	355	78	230	205	103	114	621	301	553	147	69	79
27	448	79	226	140	92	108	319	300	580	142	62	73
28	236	164	197	111	85	123	234	293	320	147	59	124
29	354	230	129	108	---	114	217	221	169	103	57	444
30	243	143	111	85	---	107	368	211	140	87	69	217
31	252	---	84	71	---	134	---	1260	---	78	91	---
TOTAL	19321	4572	2408.0	3946	5119	3876	7567	11555	7758	5288	3426	5665
MEAN	623	152	77.7	127	183	125	252	373	259	171	111	189
MAX	3050	293	230	904	699	239	621	1260	918	627	280	1320
MIN	82	76	9.0	27	60	59	130	211	129	78	57	45
CFSM	25.2	6.15	3.15	5.14	7.41	5.06	10.2	15.1	10.5	6.92	4.49	7.65
IN.	29.10	6.89	3.63	5.94	7.71	5.84	11.40	17.40	11.68	7.96	5.16	8.53
AC-FT	38320	9070	4780	7830	10150	7690	15010	22920	15390	10490	6800	11240

WTR YR 1978 TOTAL 80501.0 MEAN 221 MAX 3050 MIN 9.0 CFSM 8.95 IN 121.24 AC-FT 159700

15106100 BLACK RIVER NEAR PELICAN--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	417	518	223	43	23	18	92	349	537	165	510	134
2	660	538	1010	42	14	19	85	379	549	145	387	188
3	395	386	371	41	9.4	21	80	606	399	135	171	152
4	373	297	195	40	11	23	82	634	409	127	104	110
5	510	341	173	39	13	50	114	538	311	114	104	82
6	1540	490	155	38	16	120	133	417	284	550	151	81
7	816	350	673	38	21	140	202	352	330	715	150	63
8	598	210	992	37	25	155	183	319	305	306	108	52
9	725	150	628	37	27	165	191	276	297	216	90	47
10	655	120	320	36	29	170	167	555	255	166	76	44
11	860	105	192	36	30	165	167	988	221	150	70	82
12	434	97	157	35	29	160	169	389	201	124	64	657
13	969	83	240	34	27	155	174	313	180	112	78	973
14	522	83	226	34	23	150	160	280	179	117	52	409
15	780	71	168	35	17	145	160	273	169	124	52	225
16	247	64	139	36	15	140	151	285	176	236	52	187
17	1600	56	107	38	14	150	153	430	173	840	135	289
18	2410	53	100	40	13	158	140	457	189	288	240	187
19	644	48	100	43	12	216	153	427	180	365	115	118
20	755	51	100	47	13	690	176	347	160	682	80	93
21	549	54	99	46	14	351	189	279	147	299	67	215
22	1050	367	95	44	15	267	259	306	145	389	58	168
23	571	629	84	41	15	254	314	472	135	238	53	534
24	1570	449	74	40	16	245	342	368	133	166	50	243
25	2160	634	66	38	16	199	372	468	126	129	44	201
26	725	982	62	36	17	167	346	353	127	110	40	134
27	711	1600	57	35	17	150	367	276	123	97	39	225
28	392	698	53	33	17	138	438	264	572	86	38	319
29	1400	436	50	32	---	118	425	260	394	79	38	148
30	2550	239	47	30	---	104	374	281	221	79	480	196
31	967	---	46	29	---	97	---	360	---	254	257	---
TOTAL	28445	10199	7002	1173	508.4	5100	6358	12301	7627	7603	3953	6556
MEAN	918	340	226	37.8	18.2	165	212	397	254	245	128	219
MAX	2550	1600	1010	47	30	690	438	988	572	840	510	973
MIN	247	48	46	29	9.4	18	80	260	123	79	38	44
CFSM	37.2	13.8	9.15	1.53	.74	6.68	8.58	16.1	10.3	9.92	5.18	8.87
IN.	42.84	15.36	10.55	1.77	.77	7.68	9.58	18.53	11.49	11.45	5.95	9.87
AC-FT	56420	20230	13890	2330	1010	10120	12610	24400	15130	15080	7840	13000

CAL YR 1978 TOTAL 99846.0 MEAN 274 MAX 2550 MIN 27 CFSM 11.1 IN 150.37 AC-FT 198000
WTR YR 1979 TOTAL 96825.4 MEAN 265 MAX 2550 MIN 9.4 CFSM 10.7 IN 145.82 AC-FT 192100

15106940 HOOK CREEK ABOVE TRIBUTARY NEAR TENAKEE

LOCATION.--Lat 57°40'39", long 135°07'42", in NW¼SE¼ sec.25, T.48 S., R.63 E., Greater Sitka Borough, Hydrologic Unit 19060000, on Chichagof Island, in Tongass National Forest, on right bank 0.5 mi (0.8 km) upstream from unnamed tributary, 2.5 mi (4.0 km) upstream from mouth, and 9 mi (14 km) south of Tenakee.

DRAINAGE AREA.--4.48 mi² (11.60 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1967 to current year.

REVISED RECORDS.--WRD Alaska 1972: 1971 (M).

GAGE.--Water-stage recorder. Altitude of gage is 300 ft (90 m), from topographic map. Prior to May 15, 1969, water-stage recorder and wooden control at site 130 ft (39 m) downstream at datum 1.0 ft (0.30 m) lower.

REMARKS.--Water-discharge records good except those for Dec. 22 to Mar. 17, which are poor.

AVERAGE DISCHARGE.--12 years, 28.2 ft³/s (0.799 m³/s), 85.48 in/yr (2,171 mm/yr), 20,430 acre-ft/yr (25.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,290 ft³/s (36.5 m³/s) Sept. 15, 1976, gage height, 3.79 ft (1.155 m), from rating curve extended above 110 ft³/s (3.1 m³/s) on basis of slope-area measurement at gage height 3.7 ft (1.13 m) from floodmarks; maximum gage height, 5.71 ft (1.740 m) Mar. 13, 1972, backwater from ice; minimum daily discharge, 1.5 ft³/s (0.042 m³/s) Jan. 29 to Feb. 5, Dec. 23 and 24, 1971, Jan. 21-29, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 260 ft³/s (7.4 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 6	1300	403	11.4	2.42	0.738	Oct. 30	1600	*1,260	35.7	*3.74	1.140
Oct. 11	1115	297	8.41	2.15	0.655	Nov. 27	1330	330	9.35	2.24	0.683
Oct. 18	0500	475	13.5	2.58	0.786	Sept.13	0430	272	7.70	2.08	0.634
Oct. 25	0700	588	16.7	2.80	0.853						

Minimum daily discharge, 2.4 ft³/s (0.068 m³/s) Feb. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	82	29	8.3	4.3	3.4	12	92	56	18	94	5.5
2	119	109	100	7.4	4.5	3.5	13	94	82	17	55	7.0
3	93	74	57	6.8	4.7	3.6	10	146	76	19	24	7.0
4	48	55	33	5.3	4.8	3.9	9.6	118	82	18	18	6.6
5	49	118	26	5.8	4.9	4.2	11	102	71	14	14	5.8
6	264	98	22	5.4	4.5	4.7	10	82	56	17	12	6.2
7	98	50	69	5.2	4.0	5.2	18	72	49	46	12	5.1
8	100	35	101	5.0	3.5	6.0	20	59	50	21	11	4.5
9	124	20	69	4.9	3.3	8.0	19	48	61	17	10	4.2
10	107	24	41	4.8	2.9	10	21	110	46	15	9.1	4.2
11	171	22	30	4.7	2.6	12	20	113	41	13	7.8	14
12	93	20	26	4.8	2.5	13	20	66	43	11	7.4	47
13	147	18	40	4.9	2.4	14	23	59	35	11	7.0	95
14	100	18	27	5.0	2.5	16	22	53	39	9.1	6.6	33
15	104	68	22	5.2	2.6	18	21	54	34	8.7	6.2	24
16	48	45	18	5.3	2.6	19	22	58	33	19	5.8	18
17	192	49	35	5.4	2.7	22	20	71	32	30	5.8	25
18	316	50	61	5.5	2.8	32	23	62	32	18	5.5	18
19	96	53	54	5.6	2.9	42	29	65	29	81	5.5	13
20	75	45	57	5.6	3.0	66	32	77	25	85	5.1	12
21	72	25	39	5.7	3.2	44	34	127	24	57	5.1	11
22	137	52	28	5.7	3.3	36	52	69	24	33	5.1	11
23	92	83	24	5.6	3.3	33	66	97	22	22	4.2	21
24	132	54	21	5.5	3.3	29	64	76	21	18	4.2	21
25	324	39	18	5.4	3.3	27	62	100	21	15	3.9	21
26	95	88	17	5.4	3.3	23	64	82	21	12	3.9	21
27	75	253	15	5.2	3.3	19	79	59	18	11	3.9	74
28	50	104	13	4.9	3.4	18	108	53	27	9.6	3.9	44
29	91	58	12	4.7	---	15	115	50	24	9.1	4.2	24
30	715	36	11	4.4	---	18	102	48	18	9.2	3.9	81
31	190	---	9.4	4.2	---	17	---	61	---	29	4.2	---
TOTAL	4338	1845	1124.4	167.6	94.4	585.5	1121.6	2423	1192	712.7	368.3	684.1
MEAN	140	61.5	36.3	5.41	3.37	18.9	37.4	78.2	39.7	23.0	11.9	22.8
MAX	715	253	101	8.3	4.9	66	115	146	82	85	94	95
MIN	21	18	9.4	4.2	2.4	3.4	9.6	48	18	8.7	3.9	4.2
CFSM	31.3	13.7	8.10	1.21	.75	4.22	8.35	17.5	8.86	5.13	2.66	5.09
IN.	36.01	15.32	9.33	1.39	.78	4.86	9.31	20.11	9.90	5.92	3.06	5.68
AC-FT	8600	3660	2230	332	187	1160	2220	4810	2360	1410	731	1360

CAL YR 1978 TOTAL 12340.3 MEAN 33.8 MAX 715 MIN 2.6 CFSM 7.55 IN 102.44 AC-FT 24480
WTR YR 1979 TOTAL 14656.6 MEAN 40.2 MAX 715 MIN 2.4 CFSM 8.97 IN 121.67 AC-FT 29070

15106940 HOOK CREEK ABOVE TRIBUTARY NEAR TENAKEE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1967 to current year.

INSTRUMENTATION.--Temperature recorder since Aug. 1, 1967.

REMARKS.--Temperature records fair and complete.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 13.5°C Aug. 22, 23, 1979; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 13.5°C Aug. 22 and 23; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
JUL					
05...	1200	10	75	7.9	8.0

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.0	7.0	4.5	3.5	1.0	.5	.0	.0	.0	.0	.5	.5
2	7.0	6.5	3.5	3.5	1.0	1.0	.0	.0	.0	.0	.5	.5
3	7.0	7.0	3.5	3.0	1.0	.5	.0	.0	.0	.0	.5	.5
4	6.5	6.5	3.0	2.0	.5	.5	.0	.0	.0	.0	.5	.0
5	7.0	12.0	2.0	2.0	1.0	.5	.0	.0	.0	.0	.0	.0
6	8.0	7.0	3.0	2.0	1.0	1.0	.0	.0	.0	.0	.0	.0
7	8.0	7.0	3.0	3.0	1.0	1.0	.0	.0	.0	.0	.0	.0
8	7.0	7.0	2.0	1.5	1.0	1.0	.0	.0	.0	.0	.0	.0
9	7.0	6.5	1.5	1.0	1.0	1.0	.0	.0	.0	.0	.0	.0
10	6.5	6.0	1.0	.5	1.0	1.0	.0	.0	.0	.0	.0	.0
11	6.0	6.0	1.0	.5	1.0	.5	.0	.0	.0	.0	.0	.0
12	6.0	6.0	.5	.5	.5	.5	.0	.0	.0	.0	.0	.0
13	6.0	6.0	1.0	.5	.5	.5	.0	.0	.0	.0	.5	.0
14	6.0	6.0	1.0	.5	.5	.0	.0	.0	.0	.0	1.0	.5
15	6.0	5.0	.5	.5	.0	.0	.0	.0	.0	.0	1.0	1.0
16	5.5	5.0	.5	.5	.0	.0	.0	.0	.0	.0	1.0	1.0
17	6.0	5.0	.5	.5	.0	.0	.0	.0	.0	.0	1.0	1.0
18	6.5	6.0	.5	.5	.0	.0	.0	.0	.0	.0	1.0	1.0
19	6.0	5.5	.5	.5	.0	.0	.0	.0	.0	.0	1.0	.5
20	5.5	5.5	.5	.5	.0	.0	.0	.0	.0	.0	1.0	.5
21	5.5	5.5	.5	.5	.0	.0	.0	.0	.0	.0	1.0	1.0
22	6.0	5.5	.5	.5	.0	.0	.0	.0	.5	.0	1.0	1.0
23	5.5	5.0	.5	.5	.0	.0	.0	.0	.5	.5	1.0	1.0
24	5.0	5.0	.5	.5	.0	.0	.0	.0	.5	.5	1.0	1.0
25	5.0	5.0	1.0	.5	.0	.0	.0	.0	.5	.5	1.0	1.0
26	5.0	5.0	1.0	1.0	.0	.0	.0	.0	.5	.5	1.0	.5
27	5.0	5.0	1.5	1.0	.0	.0	.0	.0	.5	.5	1.0	1.0
28	5.0	5.0	1.5	1.5	.0	.0	.0	.0	.5	.5	1.0	.5
29	5.0	5.0	1.5	1.0	.0	.0	.0	.0	---	---	.5	.5
30	5.5	5.0	1.0	1.0	.0	.0	.0	.0	---	---	.0	.0
31	5.0	4.5	---	---	.0	.0	.0	.0	---	---	.5	.0
MONTH	8.0	4.5	4.5	.5	1.0	.0	.0	.0	.5	.0	1.0	.0

15106940 HOOK CREEK ABOVE TRIBUTARY NEAR TENAKEE--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	.5	.0	1.5	1.0	3.5	3.5	9.0	7.0	10.5	10.0	10.5	10.0
2	1.0	.0	1.5	1.5	4.0	3.5	9.0	7.0	10.5	10.0	10.0	10.0
3	1.0	1.0	1.5	1.5	4.0	4.0	8.5	8.0	10.5	9.5	10.0	10.0
4	1.5	1.0	1.5	1.5	4.0	4.0	8.5	8.5	11.5	10.0	11.0	9.5
5	1.5	1.0	1.5	1.5	4.5	4.0	9.0	8.5	10.0	10.0	10.0	8.5
6	1.5	1.0	2.0	1.5	4.5	4.0	9.5	9.0	11.0	10.0	10.0	9.0
7	1.0	1.0	2.0	1.5	4.5	4.0	9.0	9.0	10.0	9.5	10.0	8.0
8	1.0	1.0	2.0	1.5	4.5	4.0	10.0	8.5	10.5	10.0	10.0	8.5
9	1.0	1.0	2.0	1.5	5.5	4.5	10.0	9.0	10.0	9.5	9.5	9.0
10	1.0	.5	1.5	1.5	6.0	4.5	10.0	9.0	11.0	9.0	10.0	9.0
11	1.5	1.0	2.0	2.0	5.5	4.5	11.0	9.5	11.5	9.0	10.0	9.5
12	1.5	1.5	3.0	2.0	5.5	5.0	10.0	10.5	11.5	9.5	10.0	9.5
13	1.0	.0	3.0	2.0	6.0	5.0	11.0	10.0	12.0	10.0	10.0	10.0
14	1.0	.5	3.0	2.0	5.5	5.0	11.0	10.0	12.0	10.0	10.0	10.0
15	1.0	.5	3.5	2.0	6.5	5.0	10.5	10.0	11.5	10.5	10.0	10.0
16	1.0	.5	3.0	2.0	6.5	5.5	10.0	9.5	12.0	11.0	10.0	9.0
17	1.0	.5	3.0	2.0	5.5	5.5	11.5	10.0	11.5	11.0	9.5	9.0
18	1.0	.5	3.0	3.0	6.5	5.5	11.0	10.0	12.0	11.0	9.5	9.0
19	1.0	.5	3.0	3.0	6.0	5.5	10.0	10.0	13.0	10.0	9.0	8.0
20	1.0	.5	3.0	3.0	6.5	6.0	10.0	10.0	12.0	9.5	8.0	8.0
21	1.5	1.0	3.5	3.0	7.0	5.5	10.0	10.0	11.5	11.0	8.5	8.0
22	1.5	1.0	3.0	3.0	7.0	6.0	10.0	9.5	13.5	11.0	8.5	8.0
23	1.5	1.0	3.0	3.0	6.0	6.5	10.0	9.5	13.5	10.0	9.0	8.5
24	1.5	1.0	3.5	3.0	6.5	6.5	11.0	9.0	13.0	10.0	9.0	8.5
25	1.0	1.0	3.0	3.0	7.0	6.5	11.0	9.5	13.0	10.0	9.0	8.0
26	1.5	1.0	3.5	3.0	8.5	6.5	11.0	10.0	12.0	10.0	8.0	8.0
27	1.5	1.0	3.5	3.0	8.0	7.0	10.5	10.0	11.0	10.5	8.5	8.0
28	1.5	1.0	3.5	3.0	8.0	6.5	11.0	9.5	11.0	10.5	8.0	8.0
29	1.5	1.0	3.5	3.0	6.5	6.0	10.0	11.0	11.0	10.5	8.0	8.0
30	1.5	1.0	3.5	3.0	7.0	6.0	11.0	10.5	10.5	10.5	8.0	7.0
31	---	---	3.5	3.5	---	---	11.0	10.5	10.5	9.0	---	---
MONTH	1.5	.0	3.5	1.0	8.5	3.5	11.5	7.0	13.5	9.0	11.0	7.0
YEAR	13.5	.0										

15106960 HOOK CREEK NEAR TENAKEE

LOCATION.--Lat 57°40'22", long 135°10'40", in SE¼SE¼ sec.27, T.48 S., R.63 E., Greater Sitka Borough, Hydrologic Unit 19060000, on Chichagof Island, in Tongass National Forest, on right bank 1 mi (1.6 km) upstream from confluence with Kadashan River, and 9 mi (14 km) south of Tenakee.

DRAINAGE AREA.--8.00 mi² (20.72 km²).

PERIOD OF RECORD.--December 1966 to current year. Published as "above Kadashan River" prior to September 1969.

REVISED RECORDS.--WRD Alaska 1972: 1971 (M).

GAGE.--Water-stage recorder and timber-concrete control. Altitude of gage is 180 ft (55 m), from topographic map.

REMARKS.--Water-discharge records fair except those for Dec. 17 to Mar. 16 and Aug. 9 to Sept. 10, which are poor.

AVERAGE DISCHARGE.--12 years, 44.2 ft³/s (1.252 m³/s), 75.03 in/yr (1,906 mm/yr), 33,020 acre-ft/yr (40.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,510 ft³/s (42.8 m³/s) Oct. 30, 1978, gage height, 5.03 ft (1.533 m), from rating curve extended above 240 ft³/s (6.8 m³/s) on basis of slope-area measurement at gage height 5.04 ft (1.536 m), for flood of Oct. 9, 1979; maximum gage height, 5.29 ft (1.612 m) Mar. 13, 1972, backwater from ice; minimum daily discharge, 2.5 ft³/s (0.071 m³/s) Jan. 20-29, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.5 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 6	1445	550	15.6	5.03	1.533
Oct. 11	1200	401	11.4	3.03	0.924
Oct. 18	0545	722	20.4	3.78	1.152
Oct. 25	0800	789	22.3	3.91	1.192
Oct. 30	1745	*1,510	42.8	*5.03	1.533
Nov. 20	1730	347	9.83	2.87	0.875
Nov. 27	1500	500	14.2	3.29	1.003

Minimum daily discharge, 2.6 ft³/s (0.074 m³/s) Feb. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUFS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	128	42	8.7	4.8	3.6	14	114	134	24	86	6.0
2	159	163	114	8.0	4.9	3.7	12	115	97	23	67	7.6
3	151	128	82	7.5	4.8	3.8	10	168	88	21	34	7.1
4	93	95	48	7.0	4.7	4.0	8.9	136	99	27	25	6.6
5	89	166	39	6.5	4.6	4.3	11	121	79	19	20	5.9
6	324	154	35	6.1	4.5	4.8	14	95	64	22	17	7.2
7	170	89	84	5.7	4.4	5.5	22	80	56	57	14	6.1
8	157	70	134	5.4	3.9	7.3	25	68	57	32	12	5.5
9	179	61	88	5.3	3.6	9.1	24	56	67	25	11	5.0
10	145	56	60	5.2	3.2	11	25	119	55	21	10	4.6
11	240	53	43	5.2	3.0	12	25	135	49	17	9.6	10
12	155	49	37	5.3	2.8	14	24	74	45	13	8.9	45
13	222	47	61	5.4	2.7	15	27	66	45	12	8.3	98
14	157	45	49	5.5	2.6	17	25	62	45	9.8	7.8	34
15	189	42	37	5.6	2.7	18	24	61	43	8.4	7.4	26
16	104	54	30	5.7	2.8	21	26	64	42	19	7.0	18
17	299	135	29	5.8	2.9	29	25	81	40	39	6.6	28
18	503	231	32	5.9	3.0	38	27	68	39	23	6.3	19
19	174	264	36	6.0	3.1	46	33	72	36	57	5.9	12
20	137	294	50	6.1	3.2	77	38	74	33	106	5.7	8.4
21	127	268	41	6.2	3.2	52	41	60	32	71	5.5	7.1
22	205	40	30	6.3	3.3	42	62	77	31	44	5.3	6.7
23	161	56	25	6.4	3.4	42	84	112	28	32	5.2	18
24	194	57	21	6.3	3.4	36	80	90	27	26	5.0	20
25	464	71	19	6.1	3.4	34	70	117	28	20	4.9	21
26	172	123	17	6.0	3.5	30	75	101	27	16	4.8	18
27	143	358	15	5.7	3.5	26	96	69	25	14	4.7	82
28	108	184	13	5.5	3.5	23	135	61	33	11	4.6	48
29	130	72	12	5.3	---	21	144	57	33	9.4	4.5	29
30	905	53	11	5.0	---	24	130	55	27	11	4.4	53
31	291	---	9.8	4.9	---	26	---	68	---	34	4.3	---
TOTAL	6602	3606	1343.8	185.6	99.4	700.1	1356.9	2696	1504	863.6	422.7	662.8
MEAN	213	120	43.3	5.99	3.55	22.6	45.2	87.0	50.1	27.9	13.6	22.1
MAX	905	358	134	8.7	4.9	77	144	168	134	106	86	98
MIN	55	40	9.8	4.9	2.6	3.6	8.9	55	25	8.4	4.3	4.6
CFSM	26.6	15.0	5.41	.75	.44	2.83	5.65	10.9	6.26	3.49	1.70	2.76
IN.	30.70	16.77	6.25	.86	.46	3.26	6.31	12.53	6.99	4.02	1.97	3.08
AC-FT	13100	7150	2670	368	197	1390	2690	5350	2980	1710	838	1310

CAL YR 1978 TOTAL 19407.7 MEAN 53.2 MAX 905 MIN 4.8 CFSM 6.65 IN 90.23 AC-FT 38500
WTR YR 1979 TOTAL 20042.9 MEAN 54.9 MAX 905 MIN 2.6 CFSM 6.86 IN 93.19 AC-FT 39760

15106980 TONALITE CREEK NEAR TENAKEE

LOCATION.--Lat 57°40'42", long 135°13'17", Greater Sitka Borough, Hydrologic Unit 19060000, on Chichagof Island, in Tongass National Forest, on right bank 2 mi (3.2 km) upstream from mouth and 9 mi (14 km) south of Tenakee.

DRAINAGE AREA.--14.5 mi^2 (37.6 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 50 ft (15 m), from topographic map. Prior to Mar. 23, 1970, at site 40 ft (12 m) upstream on left bank at datum 0.30 ft (0.091 m) higher.

REMARKS.--Water-discharge records good except those for Dec. 26 to Mar. 24, which are poor. Satellite telemeter at station.

AVERAGE DISCHARGE.--11 years, 96.4 ft^3/s (2.730 m^3/s), 90.28 in/yr (2,293 mm/yr), 69,840 acre-ft/yr (86.1 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,340 ft^3/s (94.6 m^3/s) Oct. 5, 1972, gage height, 7.83 ft (2.387 m) in gage well, 7.96 ft (2.426 m) from floodmarks, from rating curve extended above 210 ft^3/s (5.9 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 6.0 ft^3/s (0.17 m^3/s) Jan. 15-19, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s (28 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 6	1400	1,900	53.8	6.07	1,850
Oct. 11	1400	1,060	30.0	4.63	1.411
Oct. 18	1200	2,460	69.7	6.85	2.088
Oct. 25	0930	2,580	73.1	7.00	2.134
Oct. 30	1200	*2,700	76.5	*7.15	2.179
Nov. 27	1800	1,700	48.1	5.75	1.753
Sept.13	0615	1,330	37.7	5.13	1.564

Minimum daily discharge, 6.8 ft^3/s (0.19 m^3/s) Feb. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	240	89	24	19	8.9	33	251	389	37	170	26
2	480	401	316	22	18	9.2	31	263	241	30	196	31
3	295	255	215	21	17	9.8	29	447	156	27	79	33
4	125	169	105	19	16	10	28	405	198	29	57	31
5	103	350	86	18	15	11	37	305	153	31	48	26
6	1110	361	77	17	14	12	45	222	119	35	47	28
7	304	141	231	16	13	13	54	172	113	192	45	24
8	188	105	376	16	12	15	60	136	113	78	40	22
9	332	86	234	16	11	17	57	104	142	58	36	20
10	249	75	151	15	10	19	65	231	114	50	33	20
11	709	72	95	16	9.4	21	65	368	92	45	31	32
12	265	63	288	16	8.6	24	60	146	80	40	30	111
13	526	61	155	16	7.8	28	62	117	77	37	29	431
14	268	58	127	16	7.5	32	58	103	82	35	27	87
15	395	54	87	17	7.2	35	55	99	76	35	26	61
16	124	61	72	17	7.0	40	58	107	74	49	25	43
17	874	110	79	18	6.9	44	54	201	72	89	25	62
18	1670	115	63	18	6.8	46	55	163	67	56	27	50
19	317	102	63	19	6.9	49	65	145	63	145	24	30
20	210	87	115	19	7.0	54	75	126	59	321	23	16
21	166	70	73	20	7.0	60	79	111	55	131	23	23
22	401	89	60	20	7.2	64	117	139	55	98	23	35
23	346	136	61	21	7.4	66	171	232	52	68	21	56
24	423	101	67	21	7.6	67	169	177	50	55	20	80
25	1430	133	62	21	7.9	68	148	304	49	46	20	65
26	393	208	52	22	8.1	57	158	260	46	40	20	50
27	248	959	46	22	8.3	52	199	139	44	37	20	150
28	130	437	40	22	8.8	49	314	116	107	34	21	120
29	223	171	34	21	---	43	352	108	144	31	21	90
30	2270	112	31	20	---	43	289	104	50	31	21	60
31	732	---	27	19	---	46	---	131	---	51	24	---
TOTAL	15360	5382	3577	585	282.4	1112.9	3042	5932	3132	2041	1252	1913
MEAN	495	179	115	18.9	10.1	35.9	101	191	104	65.8	40.4	63.8
MAX	2270	959	376	24	19	68	352	447	389	321	196	431
MIN	54	54	27	15	6.8	8.9	28	99	44	27	20	16
CFSM	34.1	12.3	7.93	1.30	.70	2.48	6.97	13.2	7.17	4.54	2.79	4.40
IN.	39.40	13.81	9.18	1.50	.72	2.85	7.80	15.22	8.03	5.24	3.21	4.91
AC-FT	30470	10680	7090	1160	560	2210	6030	11770	6210	4050	2480	3790

CAL YR 1978 TOTAL 39638.6 MEAN 109 MAX 2270 MIN 7.6 CFSM 7.52 IN 101.69 AC-FT 78620
WTR YR 1979 TOTAL 43611.3 MEAN 119 MAX 2270 MIN 6.8 CFSM 8.21 IN 111.88 AC-FT 86500

NOTE.--No gage-height record Jan. 7 to Feb. 28.

15106980 TONALITE CREEK NEAR TENAKEE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June 1968 to current year.

INSTRUMENTATION.--Temperature recorder since June 27, 1968.

REMARKS.--Records good except those for Jan. 11 to Mar. 13, which are missing.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 14.0°C Aug. 12, 1968; minimum, 0.0°C on many days during the winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 12.5°C Aug. 18, 19, 20, 22, and 23; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
JUL					
06...	1100	35	50	7.1	9.0

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.0	8.0	5.0	3.0	2.0	1.5	.5	.0			---	---
2	8.0	8.0	4.0	3.0	2.5	2.0	.0	.0			---	---
3	8.0	7.0	3.5	3.0	2.0	1.0	.0	.0			---	---
4	7.5	7.5	3.5	2.0	1.5	1.0	.0	.0			---	---
5	7.5	7.5	3.5	3.0	2.0	1.5	.0	.0			---	---
6	8.5	7.5	3.5	3.0	2.0	1.0	.0	.0			---	---
7	8.5	8.0	3.5	3.0	1.5	1.0	.0	.0			---	---
8	8.5	8.0	3.0	2.0	2.0	1.0	.0	.0			---	---
9	7.5	7.0	2.0	2.0	2.0	1.5	.0	.0			---	---
10	7.0	6.0	1.5	1.0	1.5	1.0	.0	.0			---	---
11	7.0	6.5	2.0	.0	1.5	1.0	---	---			---	---
12	6.5	6.0	1.5	1.0	1.0	.5	---	---			---	---
13	7.0	6.0	1.5	1.0	1.0	.0	---	---			---	---
14	6.5	6.0	1.5	1.0	1.0	.5	---	---			.0	.0
15	7.0	6.0	1.0	.0	1.0	1.0	---	---			1.0	.0
16	6.0	5.0	.5	---	1.0	.0	---	---			1.5	.5
17	7.5	5.0	.0	.0	.5	.0	---	---			1.0	.0
18	8.0	6.0	.0	.0	.5	.0	---	---			1.5	.0
19	6.5	6.0	.0	.0	1.0	.0	---	---			1.0	.0
20	6.0	5.5	.0	---	1.0	.0	---	---			1.0	.0
21	6.0	5.0	.0	.0	.5	.0	---	---			1.5	.5
22	6.5	6.0	.0	---	.5	.0	---	---			2.0	.0
23	6.5	5.0	.5	.0	.0	.0	---	---			2.0	.0
24	5.0	5.0	1.0	.5	.5	.0	---	---			2.0	1.0
25	5.5	5.0	1.0	.0	.5	.0	---	---			1.5	.0
26	5.5	5.0	1.5	1.0	.0	.0	---	---			1.5	.0
27	5.0	4.0	2.0	1.0	.0	.0	---	---			1.5	1.0
28	5.0	4.0	2.5	2.0	.0	.0	---	---			2.0	1.0
29	4.5	4.0	2.5	2.5	.5	.0	---	---			1.5	.0
30	6.0	4.5	2.5	1.5	.5	.5	---	---			1.5	.0
31	6.0	5.0	---	---	.5	.5	---	---			1.0	.0
MONTH	8.5	4.0	5.0	.0	2.5	.0	.5	.0			2.0	.0

15106980 TONALITE CREEK NEAR TENAKEE--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	2.0	1.0	3.5	2.0	5.0	4.0	10.5	8.0	11.0	10.0	11.0	10.0
2	1.5	.5	3.5	2.5	6.0	4.0	10.5	8.0	11.0	10.5	10.5	10.5
3	2.0	1.0	3.0	2.0	5.5	4.5	10.0	9.0	11.5	10.0	11.0	10.0
4	2.0	1.5	3.0	2.0	5.5	4.0	9.5	8.0	12.0	10.0	11.0	10.0
5	2.5	1.0	4.0	2.0	6.0	4.0	10.0	9.0	11.5	10.0	11.0	10.0
6	2.0	.0	4.0	2.0	6.5	5.0	10.0	9.0	12.0	10.0	10.5	10.0
7	2.0	1.5	4.0	2.0	6.0	5.0	9.5	9.0	11.5	10.0	10.5	9.0
8	2.0	1.0	4.0	2.0	5.5	5.0	10.0	9.0	11.5	10.0	10.0	9.0
9	2.5	1.5	4.0	2.5	6.0	5.0	10.0	9.0	11.5	10.5	10.0	9.0
10	2.5	1.5	3.5	2.0	7.5	5.0	10.0	9.0	12.0	10.0	10.5	9.0
11	2.5	.0	3.5	---	6.5	5.5	11.5	9.0	12.0	10.0	10.5	10.0
12	2.5	1.0	4.5	3.0	6.5	5.0	11.0	10.0	12.0	10.0	10.5	10.0
13	3.0	.0	4.5	3.0	8.0	5.5	11.0	10.0	12.0	10.0	10.5	10.5
14	2.0	1.0	4.5	2.5	7.5	6.0	11.0	10.0	12.0	10.5	10.5	10.0
15	2.5	1.5	6.0	2.5	9.0	6.0	11.0	9.5	12.0	11.0	10.5	10.0
16	3.0	1.5	5.0	3.0	9.0	6.0	10.5	9.5	12.0	11.0	10.5	9.0
17	3.0	1.0	4.0	3.0	8.0	7.0	11.0	10.0	11.5	11.5	10.0	9.0
18	3.0	1.0	4.5	3.0	8.0	6.5	11.0	10.0	12.5	11.0	10.0	9.0
19	3.5	1.0	4.5	3.0	8.0	7.0	10.5	9.0	12.5	11.0	9.5	8.0
20	3.5	1.0	5.0	3.0	8.0	7.0	10.5	10.0	12.5	10.0	9.0	8.0
21	3.5	1.0	5.5	3.5	8.5	7.0	10.5	9.0	12.0	11.0	8.5	8.0
22	3.5	1.5	4.5	4.0	9.0	7.0	10.0	9.0	12.5	11.5	8.5	8.0
23	3.0	1.5	5.5	3.0	8.5	7.0	10.0	9.0	12.5	11.0	9.5	8.0
24	3.0	1.5	5.0	3.0	9.0	8.0	12.0	9.5	12.0	11.0	9.5	8.0
25	3.0	2.0	4.5	4.0	9.5	8.0	12.0	9.0	12.0	11.0	9.0	8.0
26	4.0	2.0	5.0	4.0	10.5	8.0	11.0	10.0	12.0	10.0	8.5	8.0
27	3.5	1.5	5.0	4.0	9.5	8.0	11.0	10.0	12.0	10.0	8.5	8.0
28	3.5	1.0	5.0	4.0	8.5	8.0	11.5	9.5	12.0	11.0	8.5	8.0
29	3.5	1.0	5.5	4.0	9.0	8.0	11.5	10.0	12.0	11.0	8.5	8.0
30	4.0	2.0	5.0	4.0	8.5	7.5	11.5	10.0	11.5	11.0	8.0	7.5
31	---	---	5.0	4.5	---	---	11.0	10.0	11.0	10.0	---	---
MONTH	4.0	.0	6.0	2.0	10.5	4.0	12.0	8.0	12.5	10.0	11.0	.0
YEAR	12.5	.0										

15107000 KADASHAN RIVER NEAR TENAKEE

LOCATION.--Lat 57°41'43", long 135°12'59", in SE¼NW¼ sec. 21, T.48 S., R.63 E., Greater Sitka Borough, Hydrologic Unit 19060000, on Chichagof Island, in Tongass National Forest, on right bank 700 ft (213 m) downstream from mouth of Tonalite Creek, 0.5 mi (0.8 km) upstream from mouth at Kadashan Bay in Tenakee Inlet, and 7 mi (11 km) south of Tenakee.

DRAINAGE AREA.--37.7 mi^2 (97.6 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3 ft (0.9 m), from topographic map.

REMARKS.--Water-discharge records good except those for Dec. 25 to Apr. 13, which are poor. Most high tides cause backwater at the gage and are shown on the stage record.

AVERAGE DISCHARGE.--15 years, 231 ft^3/s (6.54 m^3/s), 83.21 in/yr (2,114 mm/yr), 167,400 acre-/yr (206 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,530 ft^3/s (185 m^3/s) Oct. 30, 1978, gage height, 10.53 ft (3.210 m), from rating curve extended above 2,800 ft^3/s (79 m^3/s); minimum daily, 14 ft^3/s (0.40 m^3/s) Jan. 29 to Feb. 1, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,600 ft^3/s (73.6 m^3/s) and maximum(*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 6	1700	3,790	107	8.66	2.640
Oct. 11	1400	2,750	77.9	7.78	2.371
Oct. 18	1330	5,000	142	9.55	2.911
Oct. 25	1030	5,000	142	9.55	2.911
Oct. 30	2200	*6,530	185	*10.53	3.210

Minimum daily discharge, 19 ft^3/s (0.54 m^3/s) Feb. 12-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	563	188	57	63	47	139	444	590	74	367	54
2	620	783	690	54	60	50	138	461	423	71	449	57
3	522	582	485	52	56	58	138	676	305	72	202	72
4	194	361	229	50	51	65	137	581	348	84	136	72
5	160	687	178	49	45	70	136	505	296	75	113	71
6	1780	688	160	49	36	76	136	389	227	118	103	71
7	680	315	515	48	32	82	135	320	201	373	101	67
8	392	216	818	48	28	88	135	261	200	161	94	61
9	628	169	507	48	25	96	137	284	258	117	87	57
10	468	147	344	49	21	102	139	345	215	110	83	56
11	1190	180	206	49	20	110	142	623	164	89	77	56
12	523	160	175	50	19	118	148	287	145	80	74	184
13	947	145	377	51	19	128	130	237	142	72	71	806
14	411	130	315	53	19	135	117	229	149	65	67	245
15	823	115	206	55	20	144	111	201	140	64	65	187
16	246	105	155	57	20	154	121	216	126	75	64	132
17	1080	98	140	60	21	170	111	351	130	203	64	211
18	3570	90	136	62	22	180	111	290	122	124	64	183
19	803	83	134	64	23	190	129	245	113	223	63	122
20	506	73	252	66	24	200	153	264	104	636	64	34
21	423	67	151	68	26	204	158	227	97	295	59	89
22	896	93	124	69	28	208	237	262	94	221	59	97
23	779	130	165	70	29	205	334	428	86	147	56	138
24	787	215	140	72	31	198	331	338	84	115	54	237
25	2800	320	115	73	34	190	299	452	81	97	51	180
26	826	550	105	74	36	180	312	437	77	84	51	145
27	589	1500	95	74	40	168	362	260	71	77	52	382
28	311	1300	82	73	44	158	503	217	85	71	51	419
29	339	670	73	71	---	150	558	200	123	68	50	226
30	4490	240	65	69	---	145	495	194	92	67	49	158
31	1890	---	60	66	---	142	---	240	---	107	51	---
TOTAL	29740	10775	7385	1850	892	4211	6232	10384	5288	4235	2991	4869
MEAN	959	359	238	59.7	31.9	136	208	335	176	137	96.5	162
MAX	4490	1500	818	74	63	208	558	676	590	636	449	806
MIN	67	67	60	48	19	47	111	194	71	64	49	34
CFSM	25.4	9.52	6.31	1.58	.85	3.61	5.52	8.89	4.67	3.63	2.56	4.30
IN.	29.34	10.63	7.29	1.83	.88	4.16	6.15	10.25	5.22	4.18	2.95	4.80
AC-FT	58990	21370	14650	3670	1770	8350	12360	20600	10490	8400	5930	9660

CAL YR 1978 TOTAL 85887 MEAN 235 MAX 4490 MIN 20 CFSM 6.23 IN 84.75 AC-FT 170400
WTR YR 1979 TOTAL 88852 MEAN 243 MAX 4490 MIN 19 CFSM 6.45 IN 87.67 AC-FT 176200

NOTE--No gage-height record Dec. 26 to Mar. 20.

15107000 KADASHAN RIVER NEAR TENAKEE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June 1966 to current year.

INSTRUMENTATION.--Temperature recorder since June 19, 1966.

REMARKS.--Interruptions in the record were due to malfunctions of the instrument, Nov. 16 to Nov. 29 and Apr. 1-2, and to clock stoppage, Jan. 27 to Mar. 19.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURES: Maximum, 17°C Aug. 7, 1968; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 16.5°C Sept. 7; minimum recorded, 1.0°C Dec. 31, Jan. 1 and 26.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
JUL				
05...	1530	74	62	9.5

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.5	8.5	7.0	6.5	2.0	2.0	1.5	1.0			---	---
2	8.5	8.5	6.5	6.5	3.0	2.0	1.5	1.5			---	---
3	8.5	8.5	6.5	6.5	3.0	3.0	1.5	1.5			---	---
4	8.5	8.5	6.5	6.0	3.0	3.0	1.5	1.5			---	---
5	7.5	8.5	6.5	6.0	3.0	3.0	1.5	1.5			---	---
6	8.5	8.5	6.0	6.0	3.0	3.0	1.5	1.5			---	---
7	8.5	8.5	6.0	6.0	3.0	3.0	1.5	1.5			---	---
8	8.5	8.5	6.0	5.5	3.0	3.0	1.5	1.5			---	---
9	8.5	8.5	5.5	5.5	3.0	3.0	2.0	1.5			---	---
10	8.5	8.5	5.5	5.5	3.0	3.0	2.0	1.5			---	---
11	8.5	8.5	5.5	5.5	3.0	3.0	1.5	1.5			---	---
12	8.5	8.5	5.5	4.5	3.0	3.0	1.5	1.5			---	---
13	8.0	8.5	5.0	4.0	3.0	3.0	1.5	1.5			---	---
14	8.5	8.0	4.5	3.5	3.0	3.0	1.5	1.5			---	---
15	8.0	8.0	4.0	3.0	3.0	3.0	1.5	1.5			---	---
16	8.0	8.0	---	---	3.0	3.0	1.5	1.5			---	---
17	8.0	8.0	---	---	3.0	3.0	1.5	1.5			---	---
18	8.0	8.0	---	---	3.0	3.0	1.5	1.5			---	---
19	8.0	8.0	---	---	3.0	3.0	1.5	1.5			---	---
20	8.0	7.5	---	---	3.0	3.0	1.5	1.5			1.5	1.5
21	7.5	7.5	---	---	3.0	2.5	1.5	1.5			1.5	1.5
22	7.5	7.5	---	---	2.5	2.0	1.5	1.5			1.5	1.5
23	7.5	7.5	---	---	2.0	2.0	1.5	1.5			1.5	1.5
24	7.5	7.0	---	---	2.0	2.0	1.5	1.5			1.5	1.5
25	7.0	7.0	---	---	2.0	2.0	1.5	1.5			1.5	1.5
26	7.0	7.0	---	---	2.0	2.0	1.5	1.0			1.5	1.5
27	7.0	7.0	---	---	2.0	2.0	---	---			1.5	1.5
28	7.0	7.0	---	---	2.0	1.5	---	---			1.5	1.5
29	7.0	7.0	---	---	1.5	1.5	---	---			1.5	1.5
30	7.0	7.0	2.0	2.0	1.5	1.5	---	---			1.5	1.5
31	7.0	7.0	---	---	1.5	1.0	---	---			1.5	1.5
MONTH	8.5	7.0	7.0		3.0	1.0	2.0					

15107000 KADASHAN RIVER NEAR TENAKEE--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	4.5	4.5	6.5	6.5	9.0	9.0	10.5	10.5	12.0	12.0
2	---	---	4.5	4.5	6.5	6.5	9.0	9.0	10.5	10.5	12.0	12.0
3	2.0	2.0	5.0	4.5	6.5	6.5	9.0	9.0	10.5	10.5	12.0	12.0
4	2.0	2.0	5.0	5.0	6.5	6.5	9.0	9.0	10.5	10.5	12.0	12.0
5	2.0	2.0	5.5	5.0	7.0	6.5	9.5	9.0	11.0	10.5	13.5	11.5
6	2.0	2.0	5.5	5.5	7.0	7.0	9.5	9.5	11.0	11.0	13.5	12.0
7	2.0	2.0	5.5	5.5	7.0	7.0	9.5	9.5	11.5	11.0	16.5	12.0
8	2.0	2.0	5.5	5.5	9.0	7.0	9.5	9.5	11.5	11.0	15.5	11.5
9	2.0	2.0	6.0	5.5	7.0	7.0	10.0	9.5	11.5	11.0	14.5	11.5
10	2.0	2.0	6.0	6.0	7.0	7.0	10.0	9.5	11.5	11.5	12.0	12.0
11	2.0	2.0	6.0	6.0	7.0	7.0	11.0	10.0	11.5	11.5	12.0	12.0
12	3.0	3.0	6.0	6.0	7.0	7.0	11.0	10.0	11.5	11.5	12.0	12.0
13	3.0	3.0	6.0	6.0	7.5	7.0	10.5	10.0	13.5	11.5	12.0	12.0
14	3.0	3.0	6.0	6.0	7.5	7.5	10.0	10.0	14.0	12.0	12.0	11.5
15	3.0	3.0	6.0	6.0	7.5	7.5	10.5	10.0	13.0	11.5	11.5	11.5
16	3.5	3.0	6.0	6.0	8.0	7.5	10.5	10.5	13.0	12.0	11.5	11.5
17	3.5	3.5	6.0	6.0	8.0	8.0	10.5	10.5	13.0	12.0	11.5	11.5
18	3.5	3.5	6.0	6.0	8.0	8.0	10.5	10.5	13.0	12.0	11.5	11.5
19	3.5	3.5	6.0	6.0	8.0	8.0	10.5	10.5	12.5	12.0	11.5	11.5
20	3.5	3.5	6.0	6.0	8.0	8.0	10.5	10.5	12.0	12.0	11.5	11.5
21	4.0	3.5	6.5	6.0	8.0	8.0	10.5	10.5	12.0	12.0	11.5	11.0
22	4.0	4.0	6.5	6.5	8.0	8.0	10.5	10.5	13.0	12.0	11.0	11.0
23	4.0	4.0	6.5	6.5	8.5	8.0	10.5	10.5	13.0	12.0	11.0	11.0
24	4.0	4.0	6.5	6.5	8.5	8.5	10.5	10.5	12.5	12.0	11.0	11.0
25	4.0	4.0	6.5	6.5	8.5	8.5	10.5	10.5	12.0	12.0	11.0	10.5
26	4.0	4.0	6.5	6.5	8.5	8.5	10.5	10.5	12.0	12.0	10.5	10.5
27	4.5	4.0	6.5	6.5	8.5	8.5	10.5	10.5	12.0	12.0	10.5	10.5
28	4.5	4.5	6.5	6.5	8.5	8.5	10.5	10.5	12.0	12.0	10.5	10.5
29	4.5	4.5	6.5	6.5	8.5	8.5	10.5	10.5	12.0	12.0	10.5	10.5
30	4.5	4.5	6.5	6.5	9.0	8.5	10.5	10.5	12.0	12.0	10.5	10.5
31	---	---	6.5	6.5	---	---	10.5	10.5	12.0	12.0	---	---
MONTH	4.5	2.0	6.5	4.5	9.0	6.5	11.0	9.0	14.0	10.5	16.5	10.5
YEAR	16.5											

15107920 INDIAN RIVER NEAR TENAKEE

LOCATION.--Lat 57°49'50", long 135°16'00", in Hydrologic Unit 19060000, on Chichagof Island, in Tongas National Forest, on left bank 5 mi (8 km) upstream from mouth and 4 mi (6 km) northwest of Tenakee.

DRAINAGE AREA.--12.9 mi^2 (33.4 km^2).

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 330 ft (100 m), from topographic map.

REMARKS.--Water-discharge records poor.

COOPERATION.--Gage-height record and 55 measurements were furnished by U.S. Forest Service.

EXTREMES FOR CURRENT PERIOD.--Water year 1976: Maximum discharge, 1,900 ft^3/s (53.8 m^3/s) Sept. 15, gage height, 8.03 ft (2.478 m), from rating curve extended above 1,100 ft^3/s (31 m^3/s); minimum daily, 8.4 ft^3/s (0.24 m^3/s) Mar. 13.

Water year 1977: Maximum discharge, 1,080 ft^3/s (30.6 m^3/s) Oct. 26, gage height, 5.18 ft (1.579 m); minimum daily, 14 ft^3/s (0.40 m^3/s) Sept. 3 and 4.

Water year 1978: Maximum discharge, 859 ft^3/s (24.3 m^3/s) Oct. 14, gage height, 4.34 ft (1.323 m); minimum daily, 7.0 ft^3/s (0.20 m^3/s) Dec. 24, 25 and Jan. 16-19.

Water year 1979: Maximum discharge, 1,060 ft^3/s (30.0 m^3/s) Oct. 30, gage height, 5.11 ft (1.558 m); minimum daily, 5.0 ft^3/s (0.14 m^3/s) Feb. 19 and 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	36	14	52	90	13	26	230	205	196	62	33
2	90	55	14	44	74	13	25	460	220	156	57	47
3	83	48	13	30	64	14	47	380	195	149	53	42
4	65	39	13	22	65	16	41	280	178	155	50	34
5	52	33	12	16	77	18	34	230	172	162	47	60
6	42	30	12	13	96	20	32	240	178	164	43	88
7	37	27	12	12	78	22	38	300	180	169	41	115
8	34	24	13	11	55	24	45	380	190	185	44	110
9	30	31	14	12	47	23	57	360	200	220	47	88
10	27	46	15	13	42	18	80	320	235	155	63	50
11	64	66	16	12	37	12	83	280	290	141	72	110
12	210	50	17	13	33	10	80	250	230	128	90	450
13	130	38	18	14	30	8.4	120	220	200	128	73	700
14	88	30	22	17	25	17	66	190	265	116	51	760
15	190	22	30	20	22	50	57	170	303	113	44	430
16	140	19	60	130	20	91	54	160	272	116	39	155
17	98	20	120	160	17	72	62	150	284	102	36	94
18	118	22	280	180	15	55	117	140	246	90	35	72
19	92	21	200	150	14	33	75	135	216	83	36	64
20	74	20	135	125	13	58	65	132	194	85	41	56
21	85	19	68	100	13	72	64	148	183	82	41	87
22	66	30	120	83	12	76	73	152	203	83	34	60
23	76	102	260	67	12	43	127	138	214	79	32	52
24	61	86	200	62	12	36	98	131	214	71	29	69
25	52	74	145	70	12	33	102	145	195	72	16	143
26	44	30	210	87	12	35	120	152	181	72	16	238
27	37	24	140	100	12	29	138	130	177	72	24	227
28	33	102	100	80	12	27	180	122	197	70	27	237
29	44	87	68	105	12	25	200	135	213	68	30	128
30	54	66	58	140	---	22	250	155	201	68	19	121
31	42	---	54	175	---	20	---	180	---	65	17	---
TOTAL	2398	1297	2453	2115	1023	1005.4	2556	6595	6431	3615	1309	4920
MEAN	77.4	43.2	79.1	68.2	35.3	32.4	85.2	213	214	117	42.2	164
MAX	210	102	280	180	96	91	250	460	303	220	90	760
MIN	27	19	12	11	12	8.4	25	122	172	65	16	33
CFSM	6.00	3.35	6.13	5.29	2.74	2.51	6.61	16.5	16.6	9.07	3.27	12.7
IN.	6.91	3.74	7.07	6.10	2.95	2.90	7.37	19.02	18.54	10.42	3.77	14.19
AC-FT	4760	2570	4870	4200	2030	1990	5070	13080	12760	7170	2600	9760

WTR YR 1976 TOTAL 35717.4 MEAN 97.6 MAX 760 MIN 8.4 CFSM 7.57 IN 102.99 AC-FT 70850

15107920 INDIAN RIVER NEAR TENAKEE--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	136	187	46	82	67	37	72	133	61	39	17
2	115	490	106	41	262	58	70	96	146	56	39	15
3	104	557	83	40	140	67	112	104	132	54	36	14
4	118	239	83	38	153	73	111	91	113	49	25	14
5	103	196	90	118	122	61	122	93	122	48	26	15
6	89	224	114	156	122	53	100	91	118	45	25	16
7	96	201	84	70	149	53	140	88	110	42	25	23
8	129	151	69	57	103	55	87	78	99	43	27	58
9	206	132	72	52	108	49	73	71	93	41	30	37
10	192	143	137	48	81	47	79	66	90	42	30	38
11	313	136	80	45	79	50	90	64	93	40	35	118
12	240	126	93	44	78	44	113	63	91	39	31	229
13	163	102	75	42	157	41	68	64	89	38	27	82
14	130	92	71	43	169	39	55	71	86	46	25	65
15	112	111	77	41	129	37	50	71	89	72	24	57
16	102	127	63	42	105	37	52	70	96	72	23	49
17	97	110	54	94	83	40	51	78	84	57	22	44
18	163	112	49	58	146	37	49	115	84	49	21	39
19	107	99	49	52	147	35	47	158	82	45	20	38
20	93	99	52	48	144	35	49	105	79	55	19	36
21	85	110	56	82	135	35	58	85	85	49	18	33
22	88	143	89	84	104	33	77	79	97	45	18	187
23	76	103	63	115	83	31	127	77	111	47	19	73
24	72	84	54	91	75	29	196	84	83	67	21	48
25	126	72	55	80	72	30	150	83	71	53	18	40
26	657	64	51	70	70	34	148	83	64	47	19	35
27	290	87	57	62	92	33	152	93	62	44	29	32
28	190	72	72	57	77	32	109	110	69	41	27	30
29	147	68	54	64	---	34	82	102	63	40	25	202
30	243	79	57	75	---	47	70	105	68	42	23	145
31	213	---	51	103	---	40	---	109	---	41	19	---
TOTAL	4979	4465	2347	2058	3267	1356	2724	2719	2802	1510	785	1829
MEAN	161	149	75.7	66.4	117	43.7	90.8	87.7	93.4	48.7	25.3	61.0
MAX	657	557	187	156	262	73	196	158	146	72	39	229
MIN	72	64	49	38	70	29	37	63	62	38	18	14
CFSM	12.5	11.6	5.87	5.15	9.07	3.39	7.04	6.80	7.24	3.78	1.96	4.73
IN.	14.36	12.87	6.77	5.93	9.42	3.91	7.85	7.84	8.08	4.35	2.26	5.27
AC-FT	9880	8860	4660	4080	6480	2690	5400	5390	5560	3000	1560	3630

CAL YR 1976 TOTAL 41360.4 MEAN 113 MAX 760 MIN 8.4 CFSM 8.76 IN 119.26 AC-FT 82040
WTR YR 1977 TOTAL 30841.0 MEAN 84.5 MAX 657 MIN 14 CFSM 6.55 IN 88.93 AC-FT 61170

15107920 INDIAN RIVER NEAR TENAKEE--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	58	53	16	19	22	39	155	205	62	24	38
2	53	48	35	13	14	20	53	230	162	76	23	26
3	46	48	23	13	12	18	68	148	160	71	22	22
4	42	113	18	12	11	16	51	123	138	56	20	20
5	36	66	16	11	10	15	47	101	108	48	19	18
6	34	55	15	11	11	18	42	97	106	43	18	16
7	46	49	14	10	16	23	70	115	103	40	20	14
8	60	46	12	10	28	29	110	116	96	38	27	13
9	38	42	11	8.5	60	47	170	105	80	35	38	11
10	42	38	10	13	41	34	340	113	69	35	46	9.4
11	116	37	10	15	34	25	73	134	65	33	34	8.6
12	233	39	9.5	13	31	23	70	140	62	38	28	9.2
13	342	54	9.0	10	28	29	62	135	60	36	25	17
14	469	120	8.5	8.5	26	40	57	132	56	38	33	49
15	374	74	8.5	8.0	23	35	52	143	52	54	32	161
16	374	50	8.8	7.0	21	82	50	147	56	46	28	75
17	567	41	11	7.0	20	98	49	141	64	38	43	48
18	373	38	12	7.0	34	84	58	154	49	33	36	40
19	212	38	11	7.0	50	78	71	165	45	31	29	261
20	153	38	10	8.0	70	130	95	130	46	31	27	212
21	127	38	8.8	14	38	255	116	117	43	29	29	129
22	220	38	8.0	26	50	120	122	138	40	34	26	100
23	144	39	7.2	26	180	98	102	136	37	40	23	72
24	118	39	7.0	45	78	110	95	130	36	38	21	60
25	117	39	7.0	140	62	130	104	135	35	40	19	54
26	100	38	7.2	220	35	155	162	135	46	36	18	49
27	97	37	8.0	120	27	70	124	134	44	33	17	44
28	82	33	19	38	24	47	101	128	38	30	16	47
29	75	37	22	33	---	37	91	110	34	28	16	104
30	79	46	20	28	---	32	109	108	62	28	17	61
31	66	---	19	23	---	31	---	185	---	26	35	---
TOTAL	4905	1476	438.5	921.0	1053	1951	2753	4180	2197	1244	809	1788.2
MEAN	158	49.2	14.1	29.7	37.6	62.9	91.8	135	73.2	40.1	26.1	59.6
MAX	567	120	53	220	180	255	340	230	205	76	46	261
MIN	34	33	7.0	7.0	10	15	39	97	34	26	16	8.6
CFSM	12.2	3.81	1.09	2.30	2.92	4.88	7.12	10.5	5.67	3.11	2.02	4.62
IN.	14.14	4.26	1.26	2.66	3.04	5.63	7.94	12.05	6.34	3.59	2.33	5.16
AC-FT	9730	2930	870	1830	2090	3870	5460	8290	4360	2470	1600	3550

CAL YR 1977 TOTAL 25869.5 MEAN 70.9 MAX 567 MIN 7.0 CFSM 5.50 IN 74.59 AC-FT 51310
WTR YR 1978 TOTAL 23715.7 MEAN 65.0 MAX 567 MIN 7.0 CFSM 5.04 IN 68.38 AC-FT 47040

15107920 INDIAN RIVER NEAR TENAKEE--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	219	86	18	18	5.9	60	150	190	52	75	28
2	234	226	168	18	15	6.2	58	148	290	48	69	27
3	141	172	125	17	13	7.0	56	170	230	49	46	26
4	96	133	90	16	9.8	8.2	54	220	195	55	39	21
5	97	161	79	16	8.2	9.5	52	215	175	48	35	17
6	492	185	73	15	7.6	11	50	190	140	45	35	19
7	217	131	97	15	7.1	13	49	160	110	49	33	21
8	193	108	181	15	6.6	16	48	133	98	56	30	27
9	255	95	121	14	6.2	20	47	145	110	70	28	31
10	240	89	91	14	5.9	22	46	170	100	44	26	38
11	392	79	75	14	5.7	25	46	210	83	45	24	50
12	290	72	67	14	5.6	28	46	150	77	38	23	64
13	260	67	73	14	5.5	32	46	110	72	38	23	174
14	230	64	69	14	5.4	37	48	94	69	35	21	78
15	280	61	62	15	5.3	42	51	89	70	34	20	55
16	142	57	56	15	5.2	49	56	105	74	41	19	49
17	432	57	52	16	5.1	54	60	120	75	80	19	62
18	725	56	52	17	5.1	58	64	135	72	49	22	48
19	290	56	48	18	5.0	64	70	122	68	80	18	42
20	216	56	46	20	5.0	69	77	110	63	172	16	40
21	169	56	42	21	5.1	73	92	105	59	97	14	41
22	296	57	39	22	5.1	76	115	125	57	80	13	41
23	227	56	36	23	5.2	77	140	155	55	61	12	78
24	274	60	33	24	5.2	76	153	170	54	52	11	68
25	604	81	30	24	5.3	74	147	160	52	48	10	75
26	257	124	28	24	5.4	72	138	182	51	43	11	63
27	202	443	26	23	5.5	70	155	135	53	39	12	110
28	151	220	24	22	5.7	68	168	110	59	37	14	95
29	185	126	22	21	---	66	190	92	86	34	18	71
30	837	99	21	20	---	64	200	100	58	33	21	89
31	395	---	19	19	---	62	---	140	---	50	31	---
TOTAL	8870	3466	2031	558	192.8	1354.8	2582	4420	2945	1702	788	1648
MEAN	286	116	65.5	18.0	6.89	43.7	86.1	143	98.2	54.9	25.4	54.9
MAX	837	443	181	24	18	77	200	220	290	172	75	174
MIN	51	56	19	14	5.0	5.9	46	89	51	33	10	17
CFSM	22.2	8.99	5.08	1.40	.53	3.39	6.67	11.1	7.61	4.26	1.97	4.26
IN.	25.58	9.99	5.86	1.61	.56	3.91	7.45	12.75	8.49	4.91	2.27	4.75
AC-FT	17590	6870	4030	1110	382	2690	5120	8770	5840	3380	1560	3270

CAL YR 1978 TOTAL 31263.2 MEAN 85.7 MAX 837 MIN 7.0 CFSM 6.64 IN 90.15 AC-FT 62010
WTR YR 1979 TOTAL 30557.6 MEAN 83.7 MAX 837 MIN 5.0 CFSM 6.49 IN 88.11 AC-FT 60610

15108000 PAVLOF RIVER NEAR TENAKEE

LOCATION.--Lat 57°50'30", long 135°02'09", Hydrologic Unit 19060000, on Chichagof Island, in Tongass National Forest, on left bank 250 ft (76 m) upstream from falls at outlet of Pavlof Lake, 0.1 mi (0.2 km) upstream from mouth at Pavlof Harbor, and 8 mi (13 km) northeast of Tenakee.

DRAINAGE AREA.--24.3 mi^2 (62.9 km^2).

PERIOD OF RECORD.--June 1957 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 20 ft (6 m), from topographic map.

REMARKS.--Records good except those for Dec. 20 to Mar. 18, which are poor.

AVERAGE DISCHARGE.--22 years, 163 ft^3/s (4.62 m^3/s), 91.09 in/yr (2,314 mm/yr), 118,100 acre-ft/yr (147 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,620 ft^3/s (131 m^3/s) Oct. 30, 1978, gage height, 9.28 ft (2.829 m), from rating curve extended above 1,200 ft^3/s (34 m^3/s); minimum, 6.8 ft^3/s (0.19 m^3/s) Jan. 16-18, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft^3/s (34 m^3/s) and maximum (*).

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 6	2400	1,480	41.9	6.72	2.048	Oct. 25	1200	2,670	75.6	7.85	2.393
Oct. 11	1700	1,320	37.4	6.54	1.993	Oct. 30	2230	*4,620	131	*9.28	2.829
Oct. 18	1430	3,030	85.8	8.14	2.481	Nov. 28	0500	1,300	36.8	6.51	1.984

Minimum daily discharge, 18 ft^3/s (0.51 m^3/s) Aug. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	579	243	97	104	105	121	362	507	112	338	32
2	389	661	367	97	105	105	116	340	516	106	361	46
3	571	437	501	97	105	105	115	454	355	125	169	74
4	253	256	196	97	105	105	108	428	364	141	119	47
5	246	376	136	97	105	103	100	433	311	113	96	39
6	782	590	112	97	105	104	99	363	252	138	83	35
7	888	378	153	97	105	104	103	309	212	416	79	30
8	397	209	436	97	107	107	117	266	192	214	70	27
9	494	148	321	97	107	108	118	218	214	154	66	22
10	528	114	249	97	107	114	120	283	213	142	57	21
11	1030	113	144	97	107	116	122	489	185	141	53	24
12	881	91	124	97	107	116	130	285	158	119	46	192
13	673	79	338	97	107	117	144	232	144	133	44	626
14	401	75	227	97	107	121	125	204	154	110	42	245
15	762	69	146	97	107	122	117	184	152	97	36	183
16	287	59	98	97	107	122	120	190	142	87	35	125
17	723	59	82	97	107	121	116	271	149	117	34	161
18	2540	59	82	97	107	121	125	262	144	116	34	127
19	901	59	82	105	107	124	140	244	140	108	34	99
20	390	59	158	109	107	135	155	232	125	130	31	83
21	321	59	100	106	107	153	162	203	115	138	29	76
22	538	59	97	106	105	154	214	216	113	151	28	76
23	548	104	97	105	105	152	297	349	108	150	26	183
24	423	145	101	105	105	151	301	323	104	153	25	202
25	1930	214	97	105	105	145	268	365	101	117	23	151
26	612	311	97	105	105	139	248	360	100	99	19	135
27	373	998	97	105	105	139	289	277	94	86	19	341
28	237	967	97	105	105	136	384	225	113	78	18	271
29	203	379	97	105	---	132	415	192	183	68	18	181
30	3370	256	97	105	---	129	400	188	149	66	18	179
31	2310	---	97	105	---	126	---	189	---	118	26	---
TOTAL	24106	7962	5269	3117	2967	3831	5389	8936	5809	4043	2076	4033
MEAN	778	265	170	101	106	124	180	288	194	130	67.0	134
MAX	3370	998	501	109	107	154	415	489	516	416	361	626
MIN	105	59	82	97	104	103	99	184	94	66	18	21
CFSM	32.0	10.9	7.00	4.16	4.36	5.10	7.41	11.9	7.98	5.35	2.76	5.51
IN.	36.90	12.19	8.07	4.77	4.54	5.86	8.25	13.68	8.89	6.19	3.18	6.17
AC-FT	47810	15790	10450	6180	5890	7600	10690	17720	11520	8020	4120	8000

CAL YR 1978 TOTAL 70070 MEAN 192 MAX 3370 MIN 13 CFSM 7.90 IN 107.26 AC-FT 139000
WTR YR 1979 TOTAL 77538 MEAN 212 MAX 3370 MIN 18 CFSM 8.72 IN 118.70 AC-FT 153800

15195000 DICK CREEK NEAR CORDOVA

LOCATION.--Lat 60°20'32", long 144°18'10", in NW¼ sec.2, T.18 S., R.6 E., Hydrologic Unit 19050003, Chugach National Forest, on left bank 1.2 mi (1.9 km) upstream from mouth at Bering Lake, and 52 mi (84 km) southeast of Cordova.

DRAINAGE AREA.--7.95 mi² (20.59 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 30 ft (9 m), from topographic map. Prior to Sept. 23, 1972 at site 100 ft (30 m) downstream at same datum.

REMARKS.--Water-discharge records fair except those for periods of no gage-height record, Jan. 23 to Mar. 4 and Mar. 23 to May 1, which are poor.

AVERAGE DISCHARGE.--9 years, 127 ft³/s (3.597 m³/s), 216.94 in/yr (5,510 mm/yr), 92,010 acre-ft/yr (113 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,380 ft³/s (67.4 m³/s) Sept. 18, 1975, gage height, 8.95 ft (2.728 m), from rating curve extended above 940 ft³/s (27 m³/s) on basis of slope-conveyance study; minimum daily, about 3.5 ft³/s (0.10 m³/s) Feb. 15-18, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42.5 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Aug. 15	2330	*1,910	54.1	*8.53	2.600	Sept.13	1400	1,520	43.0	8.11	2.472

Minimum daily discharge, about 3.5 ft³/s (0.10 m³/s) Feb. 15-18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	288	93	101	23	19	7.0	25	130	414	150	76	20
2	264	66	345	22	18	8.0	25	280	320	185	67	19
3	121	52	155	22	17	30	30	395	300	152	64	54
4	236	47	65	21	15	50	40	211	335	151	61	24
5	495	197	48	21	14	282	50	101	185	163	59	19
6	562	444	142	20	11	170	40	95	155	330	166	16
7	826	109	741	20	9.0	71	30	92	148	211	285	14
8	487	61	214	20	7.0	40	30	88	151	199	262	12
9	421	48	180	20	6.0	101	30	73	171	155	560	10
10	191	41	93	20	5.0	80	30	51	143	134	233	10
11	119	35	62	20	4.5	42	30	70	121	173	125	11
12	131	32	51	19	4.0	39	35	110	133	138	88	173
13	474	29	79	19	4.0	246	35	77	125	142	96	1010
14	159	26	62	19	4.0	158	35	64	141	145	634	207
15	88	24	45	19	3.5	123	35	67	152	133	822	40
16	69	22	37	27	3.5	77	35	74	154	107	1400	39
17	640	21	34	26	3.5	100	30	114	225	154	496	78
18	410	20	39	25	3.5	281	30	210	134	200	126	17
19	382	20	40	24	4.0	431	35	264	123	165	70	21
20	499	19	34	22	4.0	128	40	124	111	139	55	44
21	371	22	32	21	4.0	37	50	83	98	124	42	110
22	522	71	30	20	4.5	278	60	178	93	130	34	225
23	138	38	29	18	4.5	100	80	466	95	141	28	300
24	518	29	28	16	4.5	80	80	215	104	148	26	150
25	273	32	27	16	6.0	70	100	245	309	194	24	100
26	274	235	27	17	7.0	50	110	146	624	135	21	80
27	195	475	26	18	6.0	50	130	144	489	124	17	150
28	97	293	25	17	6.0	40	150	130	340	98	15	345
29	261	152	24	16	---	30	200	121	194	85	16	77
30	157	70	23	15	---	30	150	136	152	76	41	136
31	90	---	22	17	---	25	---	164	---	75	24	---
TOTAL	9758	2823	2860	620	202.0	3254.0	1780	4718	6239	4656	6033	3511
MEAN	315	94.1	92.3	20.0	7.21	105	59.3	152	208	150	195	117
MAX	826	475	741	27	19	431	200	466	624	330	1400	1010
MIN	69	19	22	15	3.5	7.0	25	51	93	75	15	10
CFSM	39.6	11.8	11.6	2.52	.91	13.2	7.46	19.1	26.2	18.9	24.5	14.7
IN.	45.65	13.21	13.38	2.90	.95	15.22	8.33	22.07	29.19	21.78	28.23	16.43
AC-FT	19350	5600	5670	1230	401	6450	3530	9360	12380	9240	11970	6960

CAL YR 1978 TOTAL 52815.0 MEAN 145 MAX 1070 MIN 9.0 CFSM 18.2 IN 247.10 AC-FT 104800
WTR YR 1979 TOTAL 46454.0 MEAN 127 MAX 1400 MIN 3.5 CFSM 16.0 IN 217.34 AC-FT 92140

15195000 DICK CREEK NEAR CORDOVA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: July 1971 to current year.

INSTRUMENTATION.--Temperature recorder since July 23, 1971.

REMARKS.--Clock stopped Dec. 28 to Feb. 14, range in temperature, 0.0°C to 2.0°C.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 11.5°C Aug. 12, 1972 and Aug. 10, 1977; minimum, 0.0°C at times during winter period most years.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 9.5°C Sept. 12 and 13; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	HARD-NESS (MG/L AS CACO3)
OCT 12...	0830	125	55	6.6	4.5	--	12.2	92	775	23
FEB 15...	1345	3.6	80	5.9	2.0	<1.0	5.6	41	754	33
MAY 02...	1330	281	46	6.7	1.5	2.0	--	--	757	18
JUN 06...	1300	147	50	6.8	--	<1.0	13.3	--	--	19
SEP 28...	1315	148	60	6.6	6.0	1.0	11.0	88	755	23

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 12...	9	7.3	1.1	2.2	.2	17	0	10	2.0
FEB 15...	13	12	.7	2.7	.1	24	0	11	2.0
MAY 02...	5	5.9	.7	2.0	.1	16	0	6.0	1.5
JUN 06...	7	6.6	.6	2.0	.3	14	0	9.0	2.7
SEP 28...	9	8.2	.6	2.9	.1	17	0	12	.9

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 12...	--	.07	.01	.42	.43	.50	.00	3	1.0
FEB 15...	--	.10	.04	.00	.02	.12	.02	2	.02
MAY 02...	--	.09	.00	.25	.25	.34	.01	17	13
JUN 06...	--	.01	.01	.02	.03	.04	.01	3	1.2
SEP 28...	1.1	.01	.05	.25	.30	.31	.00	3	1.2

15195000 DICK CREEK NEAR CORDOVA--Continued

TEMPERATURE. WATER (DEG. C). WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.0	6.5	2.0	1.5	1.5	1.5			---	---	2.0	1.5
2	8.0	7.0	1.5	1.5	2.0	1.5			---	---	1.5	1.5
3	8.0	7.0	1.5	1.0	1.5	1.0			---	---	1.5	.5
4	7.0	4.5	1.5	1.0	1.0	1.0			---	---	.5	.0
5	8.5	5.0	1.5	---	1.0	1.0			---	---	.0	.0
6	8.5	7.0	1.0	.5	1.0	.5			---	---	.0	.0
7	8.5	6.5	1.0	1.0	4.0	1.0			---	---	.0	.0
8	6.5	5.5	1.0	1.0	3.0	3.0			---	---	.0	.0
9	6.0	6.0	1.5	1.0	3.0	1.5			---	---	.0	.0
10	6.0	6.0	1.0	1.5	2.0	1.5			---	---	.0	.0
11	6.0	5.5	1.5	1.5	1.5	1.5			---	---	.0	.0
12	5.5	5.5	1.5	1.5	1.5	.0			---	---	.0	.0
13	6.0	5.0	2.0	1.5	.5	.0			---	---	.0	.0
14	6.0	5.0	2.0	1.5	.5	.5			---	---	.0	.0
15	5.0	4.0	1.5	1.5	.5	.5			1.5	1.5	.0	.0
16	4.5	4.0	1.5	1.0	.5	.5			1.5	1.5	.0	.0
17	6.0	3.5	1.0	1.0	.5	.0			1.5	1.5	.0	.0
18	6.0	4.0	1.0	1.0	.0	.0			1.5	1.5	.0	.0
19	4.0	4.0	1.5	1.0	.0	.0			1.5	1.5	.5	.0
20	4.0	4.0	1.5	1.5	.5	.0			1.5	1.0	.5	.5
21	4.0	4.0	1.5	.0	.5	.5			1.5	1.0	.5	.5
22	4.5	4.0	.0	---	.5	.5			1.5	1.5	1.0	.5
23	4.0	2.0	1.5	.0	.5	.5			2.0	1.5	1.0	1.0
24	3.0	1.0	1.5	1.5	1.0	.5			2.0	2.0	1.0	.5
25	3.5	3.0	1.5	1.0	1.0	1.0			2.0	2.0	.5	.5
26	3.0	3.0	1.0	---	1.0	1.0			2.0	1.5	.5	.5
27	3.5	3.0	1.0	---	1.5	1.0			2.0	1.5	.5	.5
28	3.5	3.5	1.0	.5	---	---			2.0	2.0	.5	.0
29	3.5	---	1.5	1.0	---	---			---	---	.0	.0
30	2.0	1.5	1.5	1.5	---	---			---	---	.0	.0
31	2.0	2.0	---	---	---	---			---	---	.5	.0
MONTH	8.5	1.0	2.0	.0	4.0	.0			2.0	1.0	2.0	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	.5	.5	1.0	1.0	3.0	2.0	7.0	4.5	6.5	6.0	8.0	6.5
2	.5	.0	1.5	1.0	3.0	2.0	7.0	4.5	7.0	6.0	8.0	6.5
3	.0	.0	2.0	.5	3.0	3.0	7.5	4.5	7.0	6.5	8.5	7.0
4	.0	.0	3.0	2.0	3.0	3.0	6.5	4.5	8.0	6.5	8.0	7.0
5	.0	.0	3.0	3.0	3.5	3.0	5.5	5.0	7.0	7.0	8.0	6.5
6	.0	.0	3.0	3.0	3.5	3.0	6.0	5.0	7.5	7.0	7.5	6.5
7	---	---	3.0	3.0	3.5	2.5	6.0	5.5	7.5	7.5	7.5	6.5
8	.0	---	3.0	3.0	4.5	3.0	6.0	5.5	8.0	7.5	7.0	6.5
9	.0	---	3.0	3.0	5.5	3.0	7.0	5.5	8.0	7.5	7.0	6.5
10	.5	.0	3.0	3.0	4.0	3.0	7.0	6.0	8.0	7.0	7.0	6.5
11	.5	.5	3.0	3.0	4.0	3.5	6.0	6.0	8.0	7.0	9.0	7.0
12	.5	.5	3.0	3.0	6.0	3.0	7.5	6.0	8.0	7.0	9.5	8.5
13	.5	.5	3.5	3.0	5.0	3.5	6.5	6.0	8.0	7.0	9.5	8.0
14	.5	.5	3.5	3.5	6.5	3.5	6.5	6.0	9.0	8.0	8.0	8.0
15	.5	.5	4.0	3.5	6.5	3.5	6.5	6.0	9.0	8.0	9.0	7.5
16	.5	.5	4.0	3.5	4.5	4.0	7.5	6.0	8.5	8.0	8.0	7.5
17	1.0	.5	4.0	3.5	4.5	4.0	7.0	6.0	8.0	6.5	8.0	7.0
18	1.0	.5	4.0	3.5	5.0	4.0	7.5	6.0	8.0	6.5	7.0	7.0
19	1.0	.5	4.0	4.0	5.0	4.0	8.0	6.5	8.0	6.5	7.0	7.0
20	1.0	.5	3.5	3.0	4.5	4.0	6.5	6.0	7.5	7.0	7.5	7.0
21	1.0	.5	3.0	2.0	5.0	4.0	6.5	6.0	8.5	7.0	7.5	7.0
22	1.0	.5	3.5	3.0	4.5	4.0	7.0	6.0	8.5	6.5	7.0	7.0
23	.5	.5	3.0	1.0	4.5	4.0	7.0	6.5	8.5	7.0	7.0	7.0
24	1.0	.5	2.0	1.0	6.0	4.0	6.5	6.5	8.5	7.0	6.5	6.5
25	1.0	.5	3.0	1.0	4.5	4.0	7.0	6.5	8.5	7.0	6.5	6.5
26	1.0	.5	3.0	1.5	4.5	4.5	7.0	6.5	8.0	7.0	6.5	6.0
27	1.0	1.0	4.5	2.0	5.0	4.5	7.5	6.5	7.5	7.0	6.5	6.0
28	1.0	1.0	4.0	2.0	4.5	4.0	7.0	6.5	7.5	7.0	6.5	6.0
29	1.0	1.0	3.0	2.0	6.0	4.0	7.5	6.5	7.5	7.0	6.0	6.0
30	1.0	1.0	3.5	3.0	7.0	4.5	7.0	6.5	7.5	7.0	6.5	6.0
31	---	---	4.0	3.0	---	---	8.0	6.0	7.5	7.0	---	---
MONTH	1.0	.0	4.5	.5	7.0	2.0	8.0	4.5	9.0	6.0	9.5	6.0
YEAR	9.5	.0										

15208000 TONSINA RIVER AT TONSINA

LOCATION.--Lat 61°39'41", long 145°11'02", in SW¼SW¼ sec.26, T.2 S., R.1 E., Hydrologic Unit 19050003, on right bank 0.2 mi (0.3 km) upstream from Richardson Highway crossing at Tonsina, 0.6 mi (1.0 km) upstream from Bernard Creek, and 0.8 mi (1.3 km) upstream from Squirrel Creek.

DRAINAGE AREA.--420 mi^2 (1,090 km^2), approximately.

PERIOD OF RECORD.--May 1950 to December 1954, January to September 1955 (fragmentary), October 1955 to current year.

REVISED RECORDS.--WDR AK-75-1: 1974.

GAGE.--Water-stage recorder. Altitude of gage is 1,500 ft (460 m), from topographic map. Prior to Oct. 16, 1957, at site 800 ft (240 m) downstream at different datum. Oct. 17, 1957 to Apr. 18, 1967, June 9, 1973 to Apr. 17, 1974, nonrecording gage and Apr. 19, 1967 to June 8, 1973, water-stage recorder at site 0.2 mi (0.3 km) downstream at prior datum. Apr. 18, 1974 to May 30, 1975, nonrecording gage at present site and datum.

REMARKS.--Records good except those for Oct. 29 to May 2, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--28 years (water years 1951-54, 1956-79), 833 ft^3/s (23.59 m^3/s), 26.93 in/yr (684 mm/yr), 603,500 acre-ft/yr (744 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,490 ft^3/s (240 m^3/s) June 17, 1962, gage height, 4.91 ft (1.497 m), from graph based on gage readings, site and datum then in use; maximum gage height, 7.00 ft (2.134 m) June 8, 1957, from graph based on gage readings, site and datum then in use; minimum daily discharge, about 35 ft^3/s (0.99 m^3/s) Mar. 11 to Apr. 20, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,850 ft^3/s (80.7 m^3/s) July 7, gage height, 20.45 ft (6.233 m); minimum daily, about 90 ft^3/s (2.5 m^3/s) Feb. 20 to Mar. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	330	190	110	100	95	90	100	550	1630	1720	2220	1350
2	320	180	110	100	95	90	100	550	1760	1700	2130	1200
3	330	170	110	100	95	90	100	505	1860	1940	2110	1100
4	320	160	110	100	95	90	100	451	1860	2270	2130	1060
5	310	160	110	100	95	90	100	438	1820	2560	2200	1010
6	310	150	110	100	95	90	110	432	1870	2760	2230	960
7	300	150	110	100	95	90	110	438	1860	2830	2220	920
8	310	150	110	100	95	90	110	425	1770	2820	2200	900
9	320	140	110	100	95	90	110	399	1740	2690	2130	900
10	310	140	110	100	95	90	110	405	1870	2530	2060	880
11	290	140	110	100	95	90	120	412	2090	2380	1990	870
12	290	130	110	100	95	90	120	425	2300	2420	1960	840
13	290	130	110	100	95	90	120	444	2280	2600	1940	860
14	290	130	110	100	95	90	120	458	2160	2640	1890	890
15	290	130	110	100	95	90	120	498	2080	2760	1930	960
16	280	120	110	100	95	90	120	535	2020	2780	2040	1010
17	280	120	110	100	95	90	120	542	1970	2730	2090	1030
18	340	120	110	100	95	90	120	542	1920	2660	2080	1020
19	350	120	110	100	95	90	130	535	1960	2630	1940	1010
20	330	120	110	100	90	90	130	542	2030	2590	1870	1030
21	300	120	110	100	90	95	140	550	2060	2600	1880	1040
22	310	110	110	100	90	95	150	580	2090	2640	1830	990
23	280	110	110	100	90	95	170	595	2240	2630	1780	940
24	280	110	110	100	90	95	190	632	2400	2560	1740	910
25	250	110	110	100	90	95	220	670	2510	2560	1740	850
26	230	110	110	100	90	95	260	724	2480	2570	1760	760
27	230	110	110	100	90	95	300	826	2360	2530	1800	690
28	210	110	110	100	90	95	400	1020	2240	2400	1780	630
29	200	110	100	100	---	95	450	1250	2040	2360	1750	580
30	200	110	100	100	---	95	500	1470	1860	2340	1670	530
31	190	---	100	100	---	95	---	1550	---	2310	1530	---
TOTAL	8870	3960	3380	3100	2615	2845	5050	19393	61130	77510	60620	27720
MEAN	286	132	109	100	93.4	91.8	168	626	2038	2500	1955	924
MAX	350	190	110	100	95	95	500	1550	2510	2830	2230	1350
MIN	190	110	100	100	90	90	100	399	1630	1700	1530	530
CFSM	.68	.31	.26	.24	.22	.22	.40	1.49	4.85	5.95	4.66	2.20
IN.	.79	.35	.30	.27	.23	.25	.45	1.72	5.41	6.87	5.37	2.46
AC-FT	17590	7850	6700	6150	5190	5640	10020	38470	121300	153700	120200	54980

CAL YR 1978 TOTAL 230970 MEAN 633 MAX 2500 MIN 100 CFSM 1.51 IN 20.46 AC-FT 458100
WTR YR 1979 TOTAL 276193 MEAN 757 MAX 2830 MIN 90 CFSM 1.80 IN 24.46 AC-FT 547800

NOTE.--No gage-height record Nov. 8 to May 2.

15212000 COPPER RIVER NEAR CHITINA
(National stream-quality accounting network station)

LOCATION.--Lat 61°27'56", long 144°27'21", in SW¼NE¼ sec.2, T.5 S., R.5 E., Hydrologic Unit 19050003, on right bank at head of Woods Canyon, 0.5 mi (0.8 km) downstream from Taral Creek and abandoned Indian village of Taral, 2.2 mi (3.5 km) upstream from Tenas Creek, and 3.5 mi (5.6 km) south of Chitina.

DRAINAGE AREA.--20,600 mi^2 (53,400 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July to September 1950, May to November 1952, October 1955 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 400 ft (122 m), from topographic map. Prior to June 2, 1952, nonrecording gage at site 0.2 mi (0.3 km) upstream at datum 1.4 ft (0.43 m) higher.

REMARKS.--Records poor for period of no gage-height record prior to May 14, good thereafter. Streamflow augmented by glaciers, which cover 17 percent of the basin.

AVERAGE DISCHARGE.--24 years, 37,220 ft^3/s (1,054 m^3/s), 24.54 in/yr (623 mm/yr), 26,970,000 acre-ft/yr (33.3 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 265,000 ft^3/s (7,500 m^3/s) July 15, 1971, gage height, 29.94 ft (9.126 m), from rating curve extended above 170,000 ft^3/s (4,800 m^3/s); minimum daily, about 2,000 ft^3/s (57 m^3/s) Mar. 1-31, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood since 1950, that of July 15, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 173,000 ft^3/s (4,900 m^3/s) July 27, gage height, 21.9 ft (6.68 m), minimum daily, about 6,500 ft^3/s (180 m^3/s) Mar. 6 to Apr. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17000	12000	10000	9000	8000	7000	6500	40000	62400	78400	147000	72100
2	16000	12000	10000	9000	8000	7000	6500	36000	68100	83200	162000	62400
3	16000	12000	10000	9000	8000	7000	6500	34000	69600	94700	146000	61000
4	15000	12000	10000	9000	8000	7000	6500	32000	68000	110000	148000	61000
5	15000	12000	10000	9000	8000	7000	6500	32000	66600	130000	150000	57500
6	15000	11000	9000	8000	7000	6500	6500	30000	66600	140000	150000	55400
7	14000	11000	9000	8000	7000	6500	6500	30000	65900	148000	140000	54700
8	14000	11000	9000	8000	7000	6500	6500	30000	62400	142000	137000	56100
9	14000	11000	9000	8000	7000	6500	6500	28000	62400	134000	136000	55400
10	14000	11000	9000	8000	7000	6500	6500	28000	70800	127000	133000	54000
11	14000	11000	9000	8000	7000	6500	7000	30000	81100	126000	125000	51900
12	14000	11000	9000	8000	7000	6500	7000	30000	87200	131000	121000	51900
13	14000	11000	9000	8000	7000	6500	7000	32000	85600	134000	124000	54700
14	14000	11000	9000	8000	7000	6500	7000	32000	79200	133000	125000	62600
15	13000	11000	9000	8000	7000	6500	7000	33300	72800	133000	130000	71200
16	13000	10000	9000	8000	7000	6500	7000	33900	73600	129000	135000	69600
17	13000	10000	9000	8000	7000	6500	8000	34500	71200	128000	134000	66600
18	14000	10000	9000	8000	7000	6500	8000	32700	68800	127000	134000	61700
19	14000	10000	9000	8000	7000	6500	9000	31000	72000	130000	130000	56100
20	13000	10000	9000	8000	7000	6500	9000	30000	77600	131000	130000	50500
21	13000	10000	9000	8000	7000	6500	10000	30000	82400	138000	130000	46300
22	13000	10000	9000	8000	7000	6500	12000	30000	87200	138000	120000	44900
23	13000	10000	9000	8000	7000	6500	14000	30000	93700	137000	120000	42900
24	13000	10000	9000	8000	7000	6500	17000	31000	103000	140000	130000	44200
25	13000	10000	9000	8000	7000	6500	20000	32100	109000	154000	140000	42900
26	13000	10000	9000	8000	7000	6500	20000	33900	106000	166000	130000	38700
27	12000	10000	9000	8000	7000	6500	25000	38100	100000	168000	130000	35700
28	12000	10000	9000	8000	7000	6500	28000	45300	95600	164000	123000	34000
29	12000	10000	9000	8000	---	6500	32000	52600	90400	162000	113000	32000
30	12000	10000	9000	8000	---	6500	36000	57500	81600	154000	100000	30000
31	12000	---	9000	8000	---	6500	---	58900	---	144000	88700	---
TOTAL	424000	320000	284000	253000	201000	204000	355000	1078800	2380800	4154300	4061700	1578000
MEAN	13680	10670	9161	8161	7179	6581	11830	34800	79360	134000	131000	52600
MAX	17000	12000	10000	9000	8000	7000	36000	58900	109000	168000	162000	72100
MIN	12000	10000	9000	8000	7000	6500	6500	28000	62400	78400	88700	30000
CFSM	.66	.52	.45	.40	.35	.32	.57	1.69	3.85	6.51	6.36	2.55
IN.	.77	.58	.51	.46	.36	.37	.64	1.95	4.30	7.50	7.33	2.85
AC-FT	841000	634700	563300	501800	398700	404600	704100	2140000	4722000	8240000	8056000	3130000

CAL YR 1978 TOTAL 12615900 MEAN 34560 MAX 166000 MIN 6000 CFSM 1.68 IN 22.78 AC-FT 25020000
WTR YR 1979 TOTAL 15294600 MEAN 41900 MAX 168000 MIN 6500 CFSM 2.03 IN 27.62 AC-FT 30340000

15212000 COPPER RIVER NEAR CHITINA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950-58, 1963-72, 1974-75, 1978 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: July to September 1957 and June to September 1965, once-daily readings during open-water. May to September 1979.
SUSPENDED SEDIMENT DISCHARGE: June to September 1957, October 1963 to September 1965 (discontinued).

INSTRUMENTATION.--Temperature recorder since May 1979.

REMARKS.--Missing record during period was result of malfunctioning recorder. River frozen during winter months. Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by temperature cross section on May 16, June 26, Aug. 6, and Sept. 26. A maximum variation of 4.0°C was found within the cross section.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SAMP- LING DEPTH (FT)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY									
16...	1631	162	1.0	5.20	160	7.9	7.6	11.8	101
16...	1632	162	4.0	5.20	--	--	7.6	--	--
16...	1633	292	2.0	10.4	160	8.0	7.9	--	--
16...	1634	292	8.0	10.4	--	--	7.8	--	--
16...	1635	372	2.2	11.2	140	7.9	7.9	11.9	103
16...	1636	372	9.0	11.2	--	--	7.9	--	--
16...	1637	442	2.2	11.2	140	7.9	8.1	--	--
16...	1638	442	9.0	11.2	--	--	8.1	--	--
16...	1639	522	2.0	8.80	130	7.8	7.9	12.0	104
16...	1640	522	8.0	8.80	--	--	8.1	--	--
16...	1641	667	--	--	--	--	8.0	--	--

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SAMP- LING DEPTH (FT)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	STREAM VELOC- ITY, POINT (FPS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
JUN							
26...	1501	602	--	21.0	6.80	155	8.0
26...	1502	602	4.2	21.0	7.40	--	--
26...	1503	602	13	21.0	--	--	--
26...	1504	602	17	21.0	6.10	--	--
26...	1506	522	--	14.0	7.70	145	8.0
26...	1507	522	2.8	14.0	8.70	140	8.0
26...	1508	522	8.4	14.0	--	140	8.0
26...	1509	522	11	14.0	6.70	140	8.0
26...	1510	522	.5	14.0	--	--	--
26...	1511	452	--	16.0	8.60	150	7.8
26...	1512	452	3.2	16.0	10.1	--	--
26...	1513	452	9.6	16.0	--	--	--
26...	1514	452	13	16.0	7.10	--	--
26...	1516	372	--	20.0	9.10	150	7.8
26...	1517	372	4.0	20.0	10.6	--	--
26...	1518	372	12	20.0	--	--	--
26...	1519	372	16	20.0	7.60	--	--
26...	1521	332	--	20.0	10.0	150	8.0
26...	1522	332	4.0	20.0	10.6	155	8.0
26...	1523	332	12	20.0	--	145	8.0
26...	1524	332	16	20.0	9.50	150	8.0
26...	1525	332	.5	20.0	--	--	--
26...	1526	292	--	22.0	10.1	145	8.0
26...	1527	292	4.4	22.0	11.2	--	--
26...	1528	292	13	22.0	--	--	--
26...	1529	292	18	22.0	9.10	--	--
26...	1531	252	--	23.0	10.2	140	8.0
26...	1532	252	4.7	23.0	11.9	--	--
26...	1533	252	14	23.0	--	--	--
26...	1534	252	19	23.0	8.50	--	--
26...	1536	172	--	20.0	10.0	135	8.1
26...	1537	172	3.9	20.0	11.4	--	--
26...	1538	172	12	20.0	--	--	--
26...	1539	172	16	20.0	8.50	--	--
26...	1541	132	--	19.0	10.1	140	7.8
26...	1542	132	3.8	19.0	11.6	135	--
26...	1543	132	11	19.0	--	135	7.8
26...	1544	132	15	19.0	8.50	135	8.0
26...	1545	132	.5	19.0	--	--	--
26...	1546	52	--	15.0	7.50	130	7.9
26...	1547	52	3.0	15.0	8.50	--	--
26...	1548	52	8.9	15.0	--	--	--
26...	1549	52	12	15.0	6.50	--	--

15212000 COPPER RIVER NEAR CHITINA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SULFATE DIS-SOLVED (MG/L AS SO4)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	SEDI-MENT, SUS-PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
JUN							
26...	--	--	--	16	21000	1370	78
26...	9.6	--	--	--	--	--	--
26...	9.4	--	--	--	--	--	--
26...	9.6	--	--	--	--	--	--
26...	--	--	--	17	33000	1980	73
26...	9.0	--	--	17	27000	1530	72
26...	8.9	--	--	17	33000	1610	78
26...	8.8	--	--	17	36000	1800	67
26...	--	12.4	109	--	--	--	--
26...	--	--	--	17	38000	1960	70
26...	8.8	--	--	--	--	--	--
26...	8.5	--	--	--	--	--	--
26...	8.5	--	--	--	--	--	--
26...	--	--	--	17	38000	1860	60
26...	8.6	--	--	--	--	--	--
26...	8.6	--	--	--	--	--	--
26...	8.6	--	--	--	--	--	--
26...	--	--	--	16	42000	2060	63
26...	8.6	--	--	16	31000	1360	92
26...	8.8	--	--	16	25000	1980	67
26...	8.7	--	--	18	30000	2360	61
26...	--	12.4	108	--	--	--	--
26...	8.3	--	--	16	39000	2330	62
26...	8.3	--	--	--	--	--	--
26...	8.4	--	--	--	--	--	--
26...	8.6	--	--	--	--	--	--
26...	--	--	--	15	53000	2370	69
26...	7.8	--	--	--	--	--	--
26...	8.0	--	--	--	--	--	--
26...	8.0	--	--	--	--	--	--
26...	--	--	--	16	66000	2700	70
26...	7.2	--	--	--	--	--	--
26...	7.7	--	--	--	--	--	--
26...	7.2	--	--	--	--	--	--
26...	--	--	--	15	44000	2210	75
26...	6.9	--	--	15	53000	2690	69
26...	7.2	--	--	15	44000	3410	57
26...	7.1	--	--	15	42000	3570	54
26...	--	12.6	105	--	--	--	--
26...	--	--	--	15	60000	3260	58
26...	7.6	--	--	--	--	--	--
26...	7.0	--	--	--	--	--	--
26...	6.9	--	--	--	--	--	--

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
AUG								
06...	2101	587	5.0	--	--	10.4	--	--
06...	2102	587	16	--	--	10.8	--	--
06...	2103	587	22	--	--	10.6	--	--
06...	2104	457	5.0	--	--	8.9	--	--
06...	2106	457	21	--	--	9.0	--	--
06...	2107	347	5.0	--	--	9.3	--	--
06...	2108	347	15	--	--	9.0	--	--
06...	2109	347	20	--	--	9.1	--	--
06...	2110	237	5.0	--	--	7.4	--	--
06...	2111	237	15	--	--	7.4	--	--
06...	2112	237	20	--	--	7.5	--	--
06...	2113	77	4.0	--	--	6.0	--	--
06...	2114	77	11	--	--	6.1	--	--
06...	2115	77	15	--	--	6.3	--	--
07...	1201	587	5.0	160	7.8	--	10.4	101
07...	1202	457	5.0	145	7.9	--	--	--
07...	1203	347	5.0	140	7.9	--	10.2	99
07...	1204	237	5.0	135	8.0	--	--	--
07...	1205	77	4.0	130	8.0	--	10.2	99
29...	1401	90	--	140	7.9	--	11.3	108
29...	1402	220	--	140	8.0	--	--	--
29...	1403	320	--	145	8.0	--	11.6	110
29...	1404	440	--	145	8.0	--	--	--
29...	1405	570	--	150	8.0	--	--	--

15212000 COPPER RIVER NEAR CHITINA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SAMP-LING DEPTH (FT)	DEPTH AT SAMPLE LOC-ATION, TOTAL (FEET)	STREAM VELOC-ITY, POINT (FPS)	PER-CENT OF TOTAL DEPTH	TEMPER-ATURE (DEG C)
SEP							
26...	1101	333	1.1	5.40	5.80	20	4.6
26...	1102	333	3.2	5.40	--	60	4.6
26...	1103	333	4.3	5.40	4.50	80	4.6
26...	1104	403	2.5	13.0	8.20	20	5.1
26...	1105	403	7.6	13.0	--	60	5.1
26...	1106	403	10	13.0	5.90	80	5.3
26...	1107	443	2.7	13.0	9.40	20	5.2
26...	1108	443	8.0	13.0	--	60	5.2
26...	1109	443	11	13.0	6.60	80	5.3
26...	1110	473	2.5	12.0	10.8	20	5.2
26...	1111	473	7.5	12.0	--	60	5.2
26...	1112	473	10	12.0	8.30	80	5.2
26...	1113	518	2.5	12.0	11.4	20	4.9
26...	1114	518	7.4	12.0	--	60	5.1
26...	1115	518	9.9	12.0	8.80	80	5.0
26...	1116	543	3.0	15.0	11.6	20	4.9
26...	1117	543	9.0	15.0	--	60	4.9
26...	1118	543	12	15.0	8.70	80	4.9
26...	1119	563	3.1	15.0	12.0	20	4.9
26...	1120	563	9.2	15.0	--	60	4.8
26...	1121	563	12	15.0	9.10	80	4.9
26...	1122	583	3.3	16.0	11.6	20	4.8
26...	1123	583	9.9	16.0	--	60	4.9
26...	1124	583	13	16.0	8.00	80	5.1
26...	1125	613	3.6	18.0	10.5	20	5.1
26...	1126	613	11	18.0	--	60	5.1
26...	1127	613	14	18.0	8.60	80	5.1
26...	1128	643	1.9	9.50	6.70	20	5.3
26...	1129	643	5.7	9.50	--	60	5.4
26...	1130	643	7.6	9.50	5.10	80	5.4

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SAMP-LING DEPTH (FT)	DEPTH AT SAMPLE LOC-ATION, TOTAL (FEET)	STREAM VELOC-ITY, POINT (FPS)	PER-CENT OF TOTAL DEPTH	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)
SEP							
27...	1201	333	--	5.40	5.10	--	180
27...	1206	403	--	13.0	7.10	--	180
27...	1208	403	2.5	13.0	8.20	20	180
27...	1209	403	7.6	13.0	--	60	180
27...	1210	403	10	13.0	5.90	80	--
27...	1211	443	--	13.0	8.00	--	180
27...	1216	473	--	12.0	9.60	--	180
27...	1221	518	--	12.0	10.1	--	180
27...	1223	518	2.5	12.0	11.4	20	180
27...	1224	518	7.4	12.0	--	60	180
27...	1225	518	9.9	12.0	8.80	80	180
27...	1226	543	--	15.0	10.1	--	180
27...	1231	563	--	15.0	10.6	--	180
27...	1236	583	--	16.0	9.80	--	175
27...	1241	613	--	18.0	9.60	--	175
27...	1243	613	3.6	18.0	10.5	20	175
27...	1244	613	11	18.0	--	60	175
27...	1245	613	14	18.0	8.60	80	175
27...	1246	643	--	9.50	5.90	--	180

15212000 COPPER RIVER NEAR CHITINA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	PH (UNITS)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SULFATE DIS- SOLVED (MG/L AS SO4)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	SEDI- MENT, SUS- PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
SEP							
27...	7.8	--	--	24	12000	504	50
27...	7.8	--	--	23	11000	450	42
27...	7.8	11.3	98	23	11000	325	58
27...	7.8	--	--	23	11000	394	48
27...	--	--	--	23	9700	545	34
27...	7.8	--	--	23	7600	350	54
27...	7.8	--	--	22	9200	275	63
27...	7.8	--	--	23	10000	260	72
27...	7.8	11.3	98	23	10000	291	68
27...	7.8	--	--	23	8600	284	64
27...	7.8	--	--	23	9000	282	65
27...	7.8	--	--	23	11000	272	72
27...	7.8	--	--	21	10000	276	74
27...	7.8	--	--	22	9500	238	76
27...	7.8	--	--	22	8400	251	72
27...	7.8	11.3	98	21	9100	206	76
27...	7.8	--	--	21	10000	235	72
27...	7.8	--	--	21	7800	226	70
27...	7.8	--	--	21	6400	256	75

DATE	TIME	STREAM WIDTH (FT)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
MAY												
16...	1630	667	36000	150	7.8	60	740	K9	<1	74	15	23
JUN												
26...	1500	722	106000	144	7.8	600	750	K5	K9	59	14	20
AUG												
06...	2100	737	149000	--	--	--	--	--	--	--	--	--
07...	1200	737	142000	135	7.8	610	750	K6	K19	59	10	19
29...	1400	720	117000	150	8.0	480	742	--	K14	62	8	20
SEP												
26...	1100	--	37400	--	--	--	--	--	--	--	--	--
27...	1200	--	35100	180	7.8	54	--	<1	K4	73	10	23

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)
MAY											
16...	4.0	5.2	1.4	72	0	17	6.2	.1	6.2	106	98
JUN											
26...	2.1	4.8	1.7	--	--	16	2.4	.1	4.1	80	78
AUG											
06...	--	--	--	--	--	--	--	--	--	--	--
07...	2.9	3.0	1.4	60	0	18	2.0	.1	4.0	74	80
29...	3.0	3.1	1.3	66	0	17	2.0	.1	3.7	71	83
SEP											
26...	--	--	--	--	--	--	--	--	--	--	--
27...	3.8	4.7	1.5	77	0	24	4.0	.1	5.8	102	105

15212000 COPPER RIVER NEAR CHITINA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
MAY											
16...	.12	--	.01	.08	.09	.00	.39	.21	--	.24	.01
JUN											
26...	.05	--	.04	.35	.39	.31	.08	.44	--	.36	.10
AUG											
06...	--	--	--	--	--	--	--	--	--	--	--
07...	.08	--	.02	.23	.25	.19	.06	.33	--	1.0	.02
29...	.03	--	.02	.96	.98	.30	.68	1.0	--	.85	.01
SEP											
26...	--	--	--	--	--	--	--	--	--	--	--
27...	.56	.05	.00	.21	.21	.00	.23	.77	.28	.17	.01

DATE	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)
MAY											
16...	4	--	2	100	100	0	1	0	1	20	10
JUN											
26...	3	--	1	400	400	0	0	0	1	70	60
AUG											
06...	--	--	--	--	--	--	--	--	--	--	--
07...	9	--	1	300	300	0	1	1	0	70	70
29...	--	--	--	--	--	--	--	--	--	--	--
SEP											
26...	--	--	--	--	--	--	--	--	--	--	--
27...	4	1	3	100	70	30	0	0	<1	20	10

DATE	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
MAY											
16...	10	6	6	0	39	36	3	9900	9800	70	11
JUN											
26...	10	23	23	0	160	160	1	47000	47000	20	41
AUG											
06...	--	--	--	--	--	--	--	--	--	--	--
07...	0	27	27	0	100	99	1	53000	53000	40	18
29...	--	--	--	--	--	--	--	--	--	--	--
SEP											
26...	--	--	--	--	--	--	--	--	--	--	--
27...	10	5	2	<3	29	28	1	12000	--	30	9

DATE	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)
MAY											
16...	11	0	200	190	10	.2	.1	.1	1	1	0
JUN											
26...	41	0	1100	1100	10	.2	.2	.0	0	0	0
AUG											
06...	--	--	--	--	--	--	--	--	--	--	--
07...	18	0	1100	1100	20	.2	.2	.0	1	0	1
29...	--	--	--	--	--	--	--	--	--	--	--
SEP											
26...	--	--	--	--	--	--	--	--	--	--	--
27...	9	0	240	240	5	.1	.1	.0	0	0	0

15212000 COPPER RIVER NEAR CHITINA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAY											
16...	0	0	0	40	30	10	11	--	796	77400	42
JUN											
26...	0	0	0	150	140	10	1.8	2.6	2380	681000	67
AUG											
06...	--	--	--	--	--	--	--	--	--	--	--
07...	0	0	0	130	120	10	13	1.9	2350	901000	65
29...	--	--	--	--	--	--	--	--	1550	490000	80
SEP											
26...	--	--	--	--	--	--	--	--	--	--	--
27...	0	0	0	40	40	<3	1.9	.2	270	25600	69

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO SEPTEMBER 1979

DATE	MAY 16,79		JUN 26,79		AUG 7,79		AUG 29,79		SEP 27,79	
TIME	1630		1500		1200		1400		1200	
TOTAL CELLS/ML	120		83		0		0		0	
DIVERSITY: DIVISION	0.0		0.9		0.0		0.0		0.0	
.CLASS	0.0		0.9		0.0		0.0		0.0	
..ORDER	0.5		0.9		0.0		0.0		0.0	
...FAMILY	0.5		1.6		0.0		0.0		0.0	
....GENUS	0.5		1.6		0.0		0.0		0.0	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	13	11	--	-	--	-	--	-	--	-
..PENNALES										
...FRAGILARIACEAE										
....FRAGILARIA	100#	89	--	-	--	-	--	-	--	-
...GOMPHONEMATACEAE										
....GOMPHONEMA	--	-	28#	33	--	-	--	-	--	-
...NAVICULACEAE										
....NAVICULA	--	-	28#	33	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....TRACHELOMONAS	--	-	28#	33	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%
K NON-IDEAL COLONY COUNT

15212000 COPPER RIVER NEAR CHITINA--Continued

TEMPERATURE, WATER (DEG. C), MAY TO SEPTEMBER 1979

MAY

DAY	MAX	MIN	MEAN	DAY	MAX	MIN	MEAN	DAY	MAX	MIN	MEAN
3	2.5	---	---	11	6.0	5.0	5.5	25	11.0	---	---
4	3.5	1.0	2.0	12	7.0	5.0	6.0	26	11.5	8.5	10.0
5	4.0	1.5	2.5	13	8.0	5.5	7.0	27	12.5	9.5	11.0
6	5.0	3.0	4.0	14	9.0	6.5	7.5	28	12.5	10.0	11.0
7	4.5	3.0	3.5	15	9.5	6.5	8.0	29	11.5	9.5	10.5
8	5.0	3.5	4.0	16	8.0	7.0	7.5	30	10.5	9.0	9.5
9	5.5	3.5	4.5	17	8.5	6.0	7.5	31	11.0	8.0	9.5
10	5.5	4.0	4.5	18	8.0	6.5	7.0				

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	10.5	9.0	10.0	13.5	10.0	11.5	---	---	---	9.5	8.0	9.0
2	11.0	9.0	10.0	13.5	11.0	---	---	---	---	9.5	8.0	9.0
3	10.0	8.5	9.5	14.5	11.5	---	13.0	---	---	10.5	8.5	9.5
4	10.0	8.5	9.5	---	---	---	13.0	11.5	---	10.0	8.5	9.5
5	11.0	8.0	9.5	---	---	---	12.5	11.5	---	9.5	8.5	9.0
6	10.0	8.5	9.0	12.0	10.5	---	12.0	11.0	---	9.0	7.5	8.5
7	9.5	7.5	8.5	---	---	---	11.0	10.0	---	9.5	7.5	8.5
8	10.5	7.5	9.0	---	---	---	11.0	9.5	10.5	9.5	7.5	8.5
9	12.5	9.0	10.5	---	10.0	---	10.5	9.5	10.0	8.5	7.5	8.0
10	12.0	10.5	11.0	---	---	---	10.0	9.0	9.5	8.5	7.0	8.0
11	11.0	9.5	10.5	---	---	---	10.5	8.5	9.5	9.5	7.5	8.5
12	10.5	8.5	9.5	11.5	11.0	---	11.0	9.0	10.0	8.5	7.5	8.0
13	10.0	8.5	9.5	11.5	11.0	---	10.5	9.0	10.0	8.5	7.0	8.0
14	10.5	8.0	9.0	---	---	---	10.5	9.0	9.5	8.5	7.5	8.0
15	11.0	8.0	9.5	10.5	9.5	---	10.0	9.0	9.5	8.5	7.5	8.0
16	10.0	8.5	9.5	---	---	---	10.0	9.0	9.5	8.0	7.0	7.5
17	10.5	8.0	9.0	11.5	10.0	---	9.0	8.5	9.0	8.5	7.0	7.5
18	12.5	9.0	10.5	---	---	---	10.0	8.0	9.0	7.5	7.0	7.0
19	12.5	10.0	11.0	---	---	---	10.0	8.5	9.0	7.0	6.5	6.5
20	12.5	10.0	11.5	12.5	11.5	---	10.0	8.5	9.5	7.5	7.0	7.0
21	12.5	10.0	11.5	12.0	11.5	---	10.5	9.0	10.0	7.5	6.5	7.0
22	14.0	10.5	---	11.5	10.0	---	10.5	9.0	9.5	7.5	6.5	7.0
23	13.5	11.5	---	---	---	---	10.5	9.0	9.5	7.5	6.5	7.0
24	13.0	11.0	---	---	---	---	11.0	9.0	10.0	---	6.5	---
25	11.5	9.0	---	---	10.0	---	11.0	9.5	10.5	---	---	---
26	10.5	9.0	9.5	---	---	---	11.5	9.5	10.5	6.0	---	---
27	10.0	8.5	9.0	---	10.0	---	11.5	10.0	10.5	7.0	4.5	---
28	9.5	8.5	9.0	12.5	---	---	11.0	9.5	10.0	---	---	---
29	10.0	8.5	9.0	---	---	---	9.0	8.5	8.5	---	---	---
30	11.5	8.5	10.0	12.0	---	---	9.0	8.0	8.5	---	---	---
31	---	---	---	11.5	10.0	---	9.5	7.5	8.5	---	---	---
MONTH	14.0	7.5	10.0				13.0	7.5		10.5		

15216000 POWER CREEK NEAR CORDOVA

LOCATION.--Lat 60°35'14", long 145°37'05", Hydrologic Unit 19050003, on right bank at old bridge site, 1 mi (1.6 km) upstream from Eyak Lake, and 5.5 mi (8.8 km) northeast of Cordova.

DRAINAGE AREA.--20.5 mi² (53.1 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July to November 1913 (fragmentary), August 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 33.5 ft (10.21 m) National Geodetic Vertical Datum of 1929 (river profile survey). July to November 1913, nonrecording gage 0.5 mi (0.8 km) upstream at different datum. August 1947 to March 1960, water-stage recorder on left bank at same datum.

REMARKS.--Records good except those for the period of no gage-height record, Dec. 16 to Mar. 24, which are poor. Streamflow augmented by glaciers, which cover 27 percent of the basin.

AVERAGE DISCHARGE.--32 years, 246 ft³/s (6.967 m³/s), 162.96 in/yr (4,139 mm/yr), 178,200 acre-ft/yr (220 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 5,540 ft³/s (157 m³/s) Sept. 25, 1949, gage height, 7.65 ft (2.332 m), from rating curve extended above 2,300 ft³/s (65 m³/s); minimum recorded, 13 ft³/s (0.37 m³/s) Apr. 29, 1950, gage height, 1.50 ft (0.457 m), but may have been less during periods of no gage-height record.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 5	0730	2,140	60.6	4.97	1.515	Sept.14	0200	*2,320	65.7	*5.06	1.542
Oct. 17	1630	1,900	53.8	4.83	1.472	Sept.20	0230	1,860	52.7	4.81	1.466
June 26	0200	1,670	47.3	4.68	1.426	Sept.23	1330	1,840	52.1	4.79	1.460
Aug. 16	0100	2,080	58.9	4.94	1.506						

Minimum daily discharge, about 23 ft³/s (0.65 m³/s) Feb. 22, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	236	223	128	50	50	29	51	155	357	452	342	272
2	504	177	180	47	47	32	54	200	464	537	353	263
3	395	156	150	44	45	35	47	258	426	670	379	316
4	299	142	116	40	50	42	50	284	370	662	390	324
5	1240	149	100	35	44	46	47	235	329	622	388	309
6	793	218	146	35	40	44	44	196	308	599	419	289
7	912	173	295	37	37	42	46	228	293	538	554	263
8	920	139	223	40	35	45	45	259	287	466	534	260
9	779	123	183	38	34	50	43	222	306	447	763	239
10	425	116	148	35	32	47	42	177	350	480	637	219
11	333	105	119	37	31	45	41	169	335	554	501	218
12	302	97	109	40	30	52	40	184	315	528	447	274
13	380	93	101	40	28	64	39	175	324	472	426	972
14	312	86	88	44	27	74	38	168	329	550	1200	1380
15	241	81	82	54	26	70	38	174	359	520	1370	641
16	215	76	72	50	26	90	37	187	383	455	1680	413
17	1020	74	66	48	25	80	36	184	379	452	1140	535
18	841	72	62	44	25	90	36	184	353	473	684	499
19	601	78	62	40	24	110	36	192	368	437	531	1000
20	419	73	56	45	24	100	36	184	351	415	543	1220
21	376	80	50	44	24	110	37	175	332	500	486	848
22	660	79	50	41	23	120	39	177	342	470	474	777
23	333	70	56	40	23	90	41	251	393	470	465	1510
24	381	67	50	38	24	70	45	275	410	660	459	1010
25	379	69	46	37	25	65	48	257	645	576	448	563
26	467	91	44	37	28	61	53	275	989	464	422	421
27	313	120	40	44	28	64	56	289	833	409	373	395
28	238	201	43	42	27	61	59	301	768	382	327	411
29	282	164	44	40	---	59	80	291	547	363	315	278
30	279	126	46	50	---	54	132	290	446	350	350	306
31	231	---	50	56	---	51	---	291	---	332	291	---
TOTAL	15106	3510	3005	1312	882	1992	1436	6887	12690	15305	17691	16415
MEAN	487	117	96.9	42.3	31.5	64.3	47.9	222	423	494	571	547
MAX	1240	223	295	56	50	120	132	301	989	670	1680	1510
MIN	215	67	40	35	23	29	36	155	287	332	291	218
CFSM	23.8	5.71	4.73	2.06	1.54	3.14	2.34	10.8	20.6	24.1	27.9	26.7
IN.	27.41	6.37	5.45	2.38	1.60	3.61	2.61	12.50	23.03	27.77	32.10	29.79
AC-FT	29960	6960	5960	2600	1750	3950	2850	13660	25170	30360	35090	32560

CAL YR 1978 TOTAL 84540 MEAN 232 MAX 1350 MIN 35 CFSM 11.3 IN 153.40 AC-FT 167700
WTR YR 1979 TOTAL 96231 MEAN 264 MAX 1680 MIN 23 CFSM 12.9 IN 174.62 AC-FT 190900

15216000 POWER CREEK NEAR CORDOVA

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1949-51, 1955, 1958, 1967-73, 1975, and 1979.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
AUG									
16...	1500	1610	22	6.8	6.5	8	1	3.0	.2

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
AUG									
16...	.8	.0	9	0	3.2	.4	.0	2.4	16

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
AUG								
16...	15	.05	.17	110	5	371	1610	44

15219000 WEST FORK OLSEN BAY CREEK NEAR CORDOVA

LOCATION.--Lat 60°45'41", long 146°10'20", in NW¼NE¼ sec.7, T.13 S., R.5 W., Hydrologic Unit 19050003, in Chugach National Forest, on left bank 600 ft (200 m) upstream from confluence with East Fork, and 21 mi (34 km) northwest of Cordova.

DRAINAGE AREA.--4.78 mi² (12.38 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1964 to current year.

REVISED RECORDS.--WSP 2136: 1965 (P). WDR AK-77-1: 1976.

GAGE.--Water-stage recorder. Altitude of gage is 40 ft (12 m), from topographic map.

REMARKS.--Water-discharge records good except those for Dec. 16 to Mar. 15 and the period of no gage-height record, June 23 to Aug. 14, which are poor.

AVERAGE DISCHARGE.--15 years, 32.2 ft³/s (0.912 m³/s), 91.48 in/yr (2,324 mm/yr), 23,330 acre-ft/yr (28.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,030 ft³/s (29.2 m³/s) Sept. 12, 1972, gage height, 5.30 ft (1.615 m), from rating curve extended above 150 ft³/s (4.2 m³/s) on basis of slope-area measurement of peak flow; maximum gage height, 5.64 ft (1.719 m) May 4, 1972, backwater from ice; minimum daily discharge, 0.5 ft³/s (0.014 m³/s) Mar. 5-21, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 378 ft³/s (10.7 m³/s) Aug. 15, gage height, 3.47 ft (1.058 m), no peak above base of 480 ft³/s (14 m³/s); minimum daily, 2 ft³/s (0.06 m³/s) Feb. 13-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	33	26	5.0	5.5	4.0	10	56	61	50	35	16
2	39	23	47	4.0	5.2	5.0	10	57	70	55	35	14
3	51	18	30	3.5	4.9	6.0	10	70	57	65	40	15
4	38	16	17	3.0	6.6	10	12	63	50	65	40	14
5	171	15	13	3.0	5.0	20	12	47	45	60	35	13
6	89	17	33	3.5	4.5	10	11	44	42	60	40	12
7	112	15	56	3.5	4.0	8.0	11	51	40	55	45	12
8	124	13	39	4.0	3.5	10	12	54	40	50	50	11
9	95	12	34	3.5	3.5	25	12	43	50	50	70	11
10	40	12	23	3.5	3.0	15	12	32	60	60	50	10
11	29	11	16	4.0	2.5	12	12	33	55	70	45	10
12	27	10	13	4.0	2.5	20	13	41	51	60	40	10
13	53	9.8	12	4.0	2.0	30	14	45	50	60	35	38
14	51	9.4	11	4.5	2.0	25	15	43	47	80	50	92
15	31	8.6	9.8	5.0	2.0	13	15	44	53	70	86	34
16	23	7.8	7.0	10	2.0	17	15	44	53	65	192	22
17	132	7.0	6.0	6.8	2.0	14	14	41	44	60	85	29
18	147	6.0	9.0	6.0	2.5	42	13	38	43	50	39	39
19	85	6.5	7.0	5.8	2.5	50	13	38	43	45	27	82
20	52	7.4	6.0	6.6	2.5	40	15	38	41	50	26	137
21	69	8.6	5.0	6.4	2.5	62	19	37	41	55	24	68
22	98	12	5.0	6.1	3.0	91	28	38	41	50	20	92
23	45	9.4	7.0	5.5	3.0	46	38	51	46	50	17	167
24	69	8.6	6.0	5.4	3.0	26	44	56	50	80	16	137
25	69	8.4	5.0	5.4	3.5	19	41	55	60	66	15	52
26	81	12	4.0	5.5	4.0	16	46	61	90	55	14	38
27	46	18	4.0	6.1	4.0	14	51	66	70	50	14	29
28	29	55	5.0	6.0	3.5	13	51	61	60	45	13	38
29	38	38	4.5	5.6	---	12	54	55	50	40	13	27
30	48	25	5.0	6.6	---	11	52	55	50	40	26	23
31	34	---	5.0	7.0	---	11	---	51	---	37	20	---
TOTAL	2025	452.5	470.3	158.8	94.7	697.0	675	1508	1553	1748	1257	1291
MEAN	65.3	15.1	15.2	5.12	3.38	22.5	22.5	48.6	51.8	56.4	40.5	43.0
MAX	171	55	56	10	6.6	91	54	70	90	80	192	167
MIN	10	6.0	4.0	3.0	2.0	4.0	10	32	40	37	13	10
CFSM	13.7	3.16	3.18	1.07	.71	4.71	4.71	10.2	10.8	11.8	8.47	9.00
IN.	15.76	3.52	3.66	1.24	.74	5.42	5.25	11.73	12.08	13.60	9.78	10.05
AC-FT	4020	898	933	315	188	1380	1340	2990	3080	3470	2490	2560

CAL YR 1978 TOTAL 10502.2 MEAN 28.8 MAX 244 MIN 4.0 CFSM 6.03 IN 81.72 AC-FT 20830
WTR YR 1979 TOTAL 11930.3 MEAN 32.7 MAX 192 MIN 2.0 CFSM 6.84 IN 92.83 AC-FT 23660

15219000 WEST FORK OLSEN BAY CREEK NEAR CORDOVA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1964 to current year.

INSTRUMENTATION.--Temperature recorder since Oct. 1, 1964.

REMARKS.--Clock stopped June 23 to Aug. 15; range in temperature, 4.5°C to 9.5°C.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 9.5°C Aug. 2, 1969, Aug. 20, 21, 1977, and during the period of recorder malfunction July 25 to Aug. 15, 1979; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 9.5°C during the period July 25 to Aug. 15; minimum, 0.0°C Mar. 6-20.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	* STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)
OCT 12...	1430	30	22	6.8	4.5	5.0	--	13.1	99	775
DEC 14...	1300	10	25	6.0	--	1.0	.00	13.6	97	743
MAY 01...	1820	53	22	5.8	--	3.0	<1.0	13.4	99	760
JUN 05...	1930	46	18	6.4	--	4.0	<1.0	12.2	93	759
JUL 25...	1200	60	14	5.8	--	7.5	<1.0	10.0	83	764
AUG 15...	1730	71	22	6.2	--	8.5	2.0	10.9	95	753
SEP 26...	1600	37	20	5.7	--	7.0	1.0	11.4	95	750

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT 12...	8	0	2.9	.3	1.0	.2	10	0	3.4
DEC 14...	9	4	3.0	.3	1.1	.1	6	0	2.6
MAY 01...	9	4	2.9	.5	.9	.2	6	0	1.6
JUN 05...	7	2	2.5	.2	.8	.2	6	0	2.4
JUL 25...	7	2	2.3	.2	.7	.3	6	0	4.0
AUG 15...	9	4	3.0	.4	1.5	.1	6	0	3.7
SEP 26...	7	1	2.5	.3	1.1	.1	8	0	3.3

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 12...	1.0	.14	.01	.17	.18	.32	.00	2	.16
DEC 14...	1.2	.24	--	--	--	--	--	1	.03
MAY 01...	1.0	.34	.00	.14	.14	.48	.02	1	.14
JUN 05...	.7	.14	.01	.17	.18	.32	.01	0	.00
JUL 25...	.4	.11	.30	.00	.30	.41	.03	3	.49
AUG 15...	.5	.13	.09	.05	.14	.27	.00	5	.96
SEP 26...	.7	.05	.03	.24	.27	.32	.00	1	.10

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	5.5	5.5	4.0	4.0	2.0	2.0	1.0	1.0	.5	.5	.5	.5
2	6.0	5.5	4.0	4.0	2.0	2.0	1.0	1.0	.5	.5	.5	.5
3	6.0	6.0	4.0	3.5	2.0	1.5	1.0	1.0	.5	.5	.5	.5
4	6.0	6.0	3.5	3.5	1.5	1.5	1.0	1.0	.5	.5	.5	.5
5	6.0	6.0	3.5	3.5	1.5	1.5	1.0	1.0	.5	.5	.5	.5
6	6.0	6.0	3.5	3.0	1.5	1.5	1.0	1.0	.5	.5	.5	.0
7	6.0	6.0	3.0	3.0	1.5	1.5	1.0	1.0	.5	.5	.0	.0
8	6.0	6.0	3.0	3.0	1.5	1.5	1.0	.5	.5	.5	.0	.0
9	6.0	5.5	3.0	2.5	1.5	1.5	.5	.5	.5	.5	.0	.0
10	5.5	5.5	3.0	3.0	1.5	1.5	.5	.5	.5	.5	.0	.0
11	5.5	5.5	3.0	2.0	1.5	1.5	.5	.5	.5	.5	.0	.0
12	5.5	5.0	3.0	2.0	1.5	1.0	.5	.5	.5	.5	.0	.0
13	5.0	5.0	2.0	1.5	1.5	1.0	.5	.5	.5	.5	.0	.0
14	5.0	4.5	1.5	1.5	1.0	1.0	.5	.5	.5	.5	.0	.0
15	4.5	4.0	1.5	.5	1.0	.5	.5	.5	.5	.5	.0	.0
16	4.5	4.0	.5	.5	.5	.5	.5	.5	.5	.5	.0	.0
17	5.0	4.5	.5	.5	.5	.5	.5	.5	.5	.5	.0	.0
18	5.0	5.0	.5	.5	.5	.5	.5	.5	.5	.5	.0	.0
19	5.0	5.0	.5	.5	.5	.5	.5	.5	.5	.5	.0	.0
20	5.0	5.0	.5	.5	.5	.5	.5	.5	.5	.5	.5	.0
21	5.0	4.5	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5
22	5.0	4.5	1.0	.5	.5	.5	.5	.5	.5	.5	.5	.5
23	5.0	4.5	1.0	1.0	.5	.5	.5	.5	.5	.5	1.5	.5
24	5.0	4.5	1.0	1.0	.5	.5	.5	.5	.5	.5	1.0	1.0
25	5.0	5.0	1.0	1.0	.5	.5	.5	.5	.5	.5	1.0	1.0
26	5.0	5.0	1.5	1.0	.5	.5	.5	.5	.5	.5	1.5	1.0
27	5.0	5.0	1.5	1.5	.5	.5	.5	.5	.5	.5	1.5	1.0
28	5.0	4.5	1.5	1.5	1.0	.5	.5	.5	.5	.5	1.0	1.0
29	4.5	4.5	1.5	1.5	1.0	1.0	.5	.5	---	---	1.0	.5
30	4.5	4.5	2.0	1.5	1.0	1.0	.5	.5	---	---	1.0	.5
31	4.5	4.0	---	---	1.0	1.0	.5	.5	---	---	1.0	.5
MONTH	6.0	4.0	4.0	.5	2.0	.5	1.0	.5	.5	.5	1.5	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY.		AUGUST		SEPTEMBER	
1	1.5	1.0	3.0	2.0	3.5	3.5			---	---	8.0	7.0
2	1.0	1.0	3.0	2.0	3.5	3.5			---	---	8.0	7.0
3	1.5	1.0	3.0	2.0	4.0	3.5			---	---	8.5	8.0
4	1.0	1.0	3.0	2.0	---	---			---	---	8.5	8.0
5	1.5	1.0	3.0	2.0	---	---			---	---	8.5	8.0
6	1.5	1.5	3.5	3.0	---	---			---	---	8.5	7.0
7	1.5	1.5	3.0	3.0	---	---			---	---	8.5	7.0
8	2.0	1.5	3.0	2.0	---	---			---	---	8.0	7.0
9	2.0	1.5	3.5	3.0	---	---			---	---	8.0	7.0
10	2.0	1.5	3.5	3.0	---	---			---	---	8.0	7.5
11	2.0	1.0	3.0	3.0	---	---			---	---	8.5	8.0
12	1.5	1.0	3.5	3.0	5.5	4.5			---	---	8.5	8.5
13	1.5	1.0	3.5	2.0	5.0	4.5			---	---	9.0	8.5
14	1.5	1.0	3.5	3.0	6.0	4.5			---	---	9.0	8.5
15	2.0	1.0	4.0	3.0	6.0	4.5			---	---	8.5	8.0
16	2.0	1.5	3.0	3.0	5.5	5.0			8.5	8.0	8.0	8.0
17	2.0	1.5	3.5	3.0	5.5	5.0			8.0	8.0	8.0	8.0
18	2.0	1.5	3.5	3.0	6.5	5.5			8.5	7.0	8.0	8.0
19	2.0	1.5	3.5	3.0	6.0	5.5			8.0	7.0	8.0	8.0
20	2.0	1.5	4.0	3.0	5.5	5.5			8.5	8.0	8.0	8.0
21	2.5	1.5	4.0	3.0	5.5	5.5			8.5	7.0	8.0	7.0
22	2.0	1.5	3.5	3.0	7.0	5.5			8.5	7.0	7.0	7.0
23	2.5	1.5	3.5	3.5	---	---			9.0	8.0	7.0	7.0
24	2.0	2.0	4.0	3.0	---	---			9.0	8.0	7.0	7.0
25	2.5	2.0	4.5	3.5	---	---			9.0	8.0	7.0	6.5
26	2.5	2.0	4.5	3.5	---	---			9.0	8.0	7.0	7.0
27	3.0	2.0	4.5	3.5	---	---			8.5	8.5	7.0	7.0
28	3.5	2.0	4.0	3.5	---	---			8.5	8.5	7.0	6.5
29	3.5	2.0	3.5	3.5	---	---			8.5	8.5	6.5	6.0
30	3.5	2.0	4.0	3.5	---	---			8.5	8.0	7.0	6.0
31	---	---	4.0	3.5	---	---			9.0	8.0	---	---
MONTH	3.5	1.0	4.5	2.0							9.0	6.0
YEAR	9.5	.0										

15238600 SPRUCE CREEK NEAR SEWARD

LOCATION.--Lat 60°04'10", long 149°27'08", Kenai Peninsula Borough, Hydrologic Unit 19050003, on left bank 0.7 mi (1.1 km) upstream from mouth at Resurrection Bay and 2.4 mi (3.9 km) south of Seward.

DRAINAGE AREA.--9.26 mi² (23.98 km²).

PERIOD OF RECORD.--September 1967 to current year (discontinued as a continuous-record station; converted to a crest-stage partial-record station).

REVISED RECORDS.--WDR AK-76-1: 1966-67(M), 1970(M), 1972(M). WDR AK-77-1: 1969 (M).

GAGE.--Water-stage recorder. Altitude of gage is 75 ft (23 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, Dec. 14 to Apr. 9, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--12 years, 76.6 ft³/s (2.169 m³/s), 112.33 in/yr (2,853 mm/yr), 55,500 acre-ft/yr (68.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,770 ft³/s (78.4 m³/s) Sept. 20, 1976, gage height, 9.49 ft (2.893 m), from rating curve extended above 1,200 ft³/s (34 m³/s) on basis of slope-area measurement of peak flow; no flow several months of most winters.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 21, 1966, reached a stage of 10.1 ft (3.08 m), from floodmarks, discharge, 3,090 ft³/s (87.5 m³/s), by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft³/s (17 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 6	1830	668	18.9	6.53	1.990
July 24	1700	1,430	40.5	7.66	2.335
Aug. 10	1730	1,320	37.4	7.50	2.286
Aug. 16	0430	1,530	43.3	7.79	2.374
Sept.14	1600	1,720	48.7	8.03	2.448
Sept. 20	1200	1,150	32.6	7.26	2.213
Sept. 22	1200	*1,770	50.1	*8.09	2.466

Minimum daily discharge, about 0.2 ft³/s (0.006 m³/s) Feb. 10 to Mar. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	39	19	4.0	1.0	.20	2.0	38	182	183	106	26
2	27	34	20	3.0	1.0	.20	2.0	57	222	325	112	28
3	25	30	17	3.0	1.0	.20	2.0	60	192	380	116	26
4	31	28	16	3.0	1.0	.20	2.0	67	166	295	106	28
5	279	27	14	3.0	.50	.20	2.0	61	157	210	97	23
6	508	25	14	3.0	.50	.20	3.0	58	145	160	106	24
7	290	23	23	3.0	.50	.50	4.0	57	138	160	256	23
8	206	20	31	3.0	.50	.50	5.0	61	134	143	275	25
9	206	19	30	3.0	.50	.50	5.0	52	160	136	810	21
10	131	19	23	2.0	.20	.50	9.6	42	218	143	914	18
11	102	18	19	2.0	.20	1.0	9.2	36	238	151	476	19
12	78	17	17	2.0	.20	1.0	8.8	39	254	157	286	30
13	68	16	16	2.0	.20	1.0	8.8	40	226	131	200	57
14	55	16	15	2.0	.20	2.0	8.4	43	234	151	607	1180
15	49	16	15	2.0	.20	2.0	8.4	40	222	160	599	764
16	104	16	15	4.0	.20	2.0	8.4	42	196	138	1070	234
17	308	16	15	4.0	.20	2.0	8.4	46	178	145	513	182
18	258	16	10	4.0	.20	2.0	8.0	46	186	143	238	166
19	145	16	10	4.0	.20	2.0	7.1	48	189	136	175	502
20	108	14	9.0	4.0	.20	2.0	6.8	50	169	145	157	884
21	81	16	9.0	3.0	.20	3.0	6.5	49	157	129	124	527
22	60	16	8.0	3.0	.20	5.0	6.8	49	189	116	112	930
23	67	14	8.0	3.0	.20	5.0	8.0	57	218	151	95	933
24	122	14	7.0	3.0	.20	4.0	9.6	61	189	729	84	522
25	112	14	7.0	2.0	.20	4.0	13	89	272	400	81	274
26	89	42	6.0	2.0	.20	3.0	14	127	232	218	76	355
27	61	34	6.0	2.0	.20	3.0	20	178	151	163	68	254
28	50	27	5.0	2.0	.20	2.0	23	192	134	143	70	160
29	86	21	5.0	2.0	---	2.0	26	166	136	129	43	116
30	61	18	4.0	2.0	---	2.0	26	138	140	116	34	208
31	44	---	4.0	1.0	---	2.0	---	140	---	106	30	---
TOTAL	3839	641	417.0	85.0	10.30	55.20	271.8	2229	5624	5992	8036	8539
MEAN	124	21.4	13.5	2.74	.37	1.78	9.06	71.9	187	193	259	285
MAX	508	42	31	4.0	1.0	5.0	26	192	272	729	1070	1180
MIN	25	14	4.0	1.0	.20	.20	2.0	36	134	106	30	18
CFSM	13.4	2.31	1.46	.30	.04	.19	.98	7.77	20.2	20.8	28.0	30.8
IN.	15.42	2.57	1.68	.34	.04	.22	1.09	8.95	22.59	24.07	32.28	34.30
AC-FT	7610	1270	827	169	20	109	539	4420	11160	11890	15940	16940

CAL YR 1978 TOTAL 24768.30 MEAN 67.9 MAX 711 MIN 4.0 CFSM 7.33 IN 99.49 AC-FT 49130
WTR YR 1979 TOTAL 35739.30 MEAN 97.9 MAX 1180 MIN .20 CFSM 10.6 IN 143.56 AC-FT 70890

15238795 SELDOVIA RIVER NEAR SELDOVIA

LOCATION.--Lat 59°23'16", long 151°40'31", in NW¼NE¼ sec.20, T.9 S., R.14 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on right bank 0.4 mi (0.6 km) upstream from mouth at head of Seldovia Bay and 3.5 mi (5.6 km) south of Seldovia.

DRAINAGE AREA.--26.2 mi² (67.9 km²).

PERIOD OF RECORD.--October 1978 to September 1979.

GAGE.--Water-stage recorder. Altitude of gage is 20 ft (6 m), from topographic map.

REMARKS.--Records good except those above 550 ft³/s (15.6 m³/s) and those for Dec. 12 to Mar. 21, which are fair. Several observations of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,110 ft³/s (59.8 m³/s) Oct. 23, gage height, 10.70 ft (3.261 m), from rating curve extended above 520 ft³/s (14.7 m³/s); minimum discharge, 40 ft³/s (1.13 m³/s) Mar. 27, gage height, 6.98 ft (2.128 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	212	330	120	65	58	56	420	556	148	81	60
2	60	172	222	100	65	58	56	492	608	146	74	57
3	58	148	156	90	65	58	59	332	526	208	70	56
4	72	148	126	85	60	58	79	328	464	215	66	52
5	612	151	130	80	60	58	79	336	395	178	64	50
6	810	143	231	75	60	58	90	301	328	151	64	49
7	506	123	597	75	60	58	90	301	301	138	64	48
8	436	107	657	70	60	58	85	297	285	136	85	47
9	400	98	488	70	60	58	83	267	282	118	437	45
10	336	94	282	65	60	58	85	228	378	105	1240	45
11	235	87	215	65	60	58	79	202	468	102	566	45
12	215	83	175	65	60	58	76	231	431	116	408	45
13	327	83	150	65	60	58	72	245	348	102	397	47
14	245	76	125	65	60	58	68	242	332	96	608	47
15	205	72	115	100	60	57	66	245	297	102	1170	174
16	971	72	100	100	60	56	64	404	344	92	1160	181
17	1330	72	100	90	60	56	66	463	293	85	546	136
18	715	67	100	80	60	56	78	541	242	85	348	138
19	434	74	90	75	60	56	78	404	238	83	356	225
20	293	83	90	75	60	56	79	352	245	76	293	395
21	215	265	90	70	60	100	85	352	225	79	218	242
22	172	249	85	70	60	138	98	328	199	79	172	711
23	517	164	85	70	60	92	126	365	208	98	140	640
24	1050	128	80	70	60	64	162	352	231	784	118	426
25	551	125	80	65	60	52	205	348	285	534	102	488
26	459	748	80	65	60	47	218	382	249	263	92	960
27	304	582	75	65	60	48	208	516	181	178	83	468
28	225	348	75	65	58	52	228	572	148	136	76	293
29	587	222	75	65	---	58	228	546	143	114	72	208
30	414	167	90	65	---	58	231	507	138	100	66	584
31	270	---	120	65	---	57	---	482	---	90	63	---
TOTAL	13087	5163	5414	2345	1693	1915	3277	11381	9368	4937	9299	6962
MEAN	422	172	175	75.6	60.5	61.8	109	367	312	159	300	232
MAX	1330	748	657	120	65	138	231	572	608	784	1240	960
MIN	58	67	75	65	58	47	56	202	138	76	63	45
CFSM	16.1	6.57	6.68	2.89	2.31	2.36	4.16	14.0	11.9	6.07	11.5	8.86
IN.	18.58	7.33	7.69	3.33	2.40	2.72	4.65	16.16	13.30	7.01	13.20	9.88
AC-FT	25960	10240	10740	4650	3360	3800	6500	22570	18580	9790	18440	13810

WTR YR 1979 TOTAL 74841 MEAN 205 MAX 1330 MIN 45 CFSM 7.82 IN 106.26 AC-FT 148400

15238820 BARBARA CREEK NEAR SELDOVIA

LOCATION.--Lat 59°28'50", long 151°38'42", in SW¼ sec.15, T.8 S., R.14 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on left bank 0.5 mi (0.8 km) upstream from mouth and 3.7 mi (6.0 km) northeast of Seldovia.

DRAINAGE AREA.--20.7 mi² (53.6 km²).

PERIOD OF RECORD.--June 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 40 ft (12 m), from topographic map.

REMARKS.--Records fair except those for Feb. 3 to Apr. 17, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--7 years, 97.4 ft³/s (2.758 m³/s), 63.90 in/yr (1,623 mm/yr), 70,570 acre-ft/yr (87.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 974 ft³/s (27.6 m³/s) May 18, 1977, gage height, 4.53 ft (1.381 m), from rating curve extended above 410 ft³/s (11.6 m³/s); minimum daily, about 16 ft³/s (0.45 m³/s) Feb. 27 to Apr. 3, 1973 and Mar. 18 to Apr. 15, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 824 ft³/s (23.3 m³/s) Oct. 17, gage height, 4.32 ft (1.317 m); from rating curve extended above 410 ft³/s (11.6 m³/s); minimum daily, about 20 ft³/s (0.57 m³/s) Mar. 5-20 and 24-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	160	116	51	39	25	22	118	345	150	77	58
2	53	136	104	49	39	25	22	138	363	163	74	55
3	52	118	92	46	35	25	24	134	332	190	70	50
4	55	112	87	44	35	25	24	134	312	205	66	48
5	98	105	83	43	35	20	24	132	283	190	64	46
6	188	98	95	42	35	20	24	129	250	178	62	44
7	210	89	115	43	35	20	24	134	236	167	61	41
8	265	81	131	43	35	20	26	134	228	156	60	40
9	256	76	131	39	35	20	26	125	225	146	82	39
10	223	71	113	39	30	20	26	118	248	134	160	38
11	195	66	107	39	30	20	28	112	280	131	140	36
12	176	63	104	39	30	20	28	110	302	138	123	36
13	192	61	92	39	30	20	28	107	271	127	118	36
14	169	56	82	40	30	20	30	108	262	118	148	36
15	160	53	80	40	30	20	30	107	250	118	197	39
16	283	63	92	42	25	20	33	123	271	108	248	36
17	684	86	101	39	25	20	33	132	245	102	210	36
18	505	50	64	40	25	20	38	146	228	101	185	36
19	356	47	59	52	25	20	39	146	220	98	174	36
20	292	47	56	98	25	20	40	146	220	95	148	36
21	242	74	54	78	25	25	41	144	205	98	131	34
22	202	72	75	59	25	30	46	146	192	95	116	54
23	234	65	71	39	25	25	50	156	195	96	107	65
24	107	62	80	39	25	20	65	160	218	183	96	75
25	84	63	91	39	25	20	76	165	248	174	88	83
26	268	142	83	39	25	20	84	183	225	134	82	180
27	223	188	44	39	25	22	87	228	190	116	76	156
28	195	154	41	39	25	22	92	274	167	104	72	131
29	245	127	41	39	---	22	96	277	156	94	68	113
30	212	112	40	39	---	22	99	265	152	88	64	165
31	183	---	51	39	---	22	---	280	---	82	61	---
TOTAL	6662	2697	2575	1395	828	670	1305	4811	7319	4079	3428	1878
MEAN	215	89.9	83.1	45.0	29.6	21.6	43.5	155	244	132	111	62.6
MAX	684	188	131	98	39	30	99	280	363	205	248	180
MIN	52	47	40	39	25	20	22	107	152	82	60	34
CFSM	10.4	4.34	4.01	2.17	1.43	1.04	2.10	7.49	11.8	6.38	5.36	3.02
IN.	11.97	4.85	4.63	2.51	1.49	1.20	2.35	8.65	13.15	7.33	6.16	3.37
AC-FT	13210	5350	5110	2770	1640	1330	2590	9540	14520	8090	6800	3730

CAL YR 1978 TOTAL 36113 MEAN 98.9 MAX 684 MIN 18 CFSM 4.78 IN 64.90 AC-FT 71630
WTR YR 1979 TOTAL 37647 MEAN 103 MAX 684 MIN 20 CFSM 4.98 IN 67.65 AC-FT 74670

15239000 BRADLEY RIVER NEAR HOMER

LOCATION.--Lat 59°45'24", long 150°51'02", in NE¼SW¼ sec.8, T.5 S., R.9 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on right bank about 800 ft (200 m) downstream from Bradley Lake outlet, 3.5 mi (5.6 km) upstream from unnamed tributary, and 26 mi (42 km) northeast of Homer.

DRAINAGE AREA.--54 mi^2 (140 km^2), approximately. Drainage area varies according to position of glacier terminus in headwaters and could be about 4 mi^2 (10 km^2) greater.

PERIOD OF RECORD.--July to August 1955, October 1957 to current year.

REVISED RECORDS.--WSP 2136: 1960 (M), 1965. AK-77-1: 1958, 1961, 1963 (M), 1966, 1967, 1970, 1972, 1974, 1976.

GAGE.--Water-stage recorder. Altitude of gage is 1,050 ft (320 m), from topographic map. July 13-22, 1955, nonrecording lake gage at site 1 mi (1.6 km) upstream and July 23 to Aug. 5, 1955, at site 3 mi (4.8 km) upstream at different datums.

REMARKS.--Records good except those for Dec. 8 to May 3, which are poor. Streamflow augmented by glaciers, which cover 36 percent of the basin.

AVERAGE DISCHARGE.--22 years, 423 ft^3/s (11.98 m^3/s), 106.38 in/yr (2,702 mm/yr), 306,500 acre-ft/yr (378 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,020 ft^3/s (170 m^3/s) Aug. 10, 1979, gage height, 9.46 ft (2.883 m); minimum daily, about 16 ft^3/s (0.45 m^3/s) Mar. 26 to Apr. 25, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,020 ft^3/s (170 m^3/s) Aug. 10, gage height, 9.46 ft (2.883 m); minimum daily, about 26 ft^3/s (0.736 m^3/s) Mar. 15 to Apr. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	240	244	147	60	30	28	26	60	667	613	925	663
2	236	236	146	60	30	28	26	80	793	687	959	616
3	231	234	146	60	30	28	26	100	837	892	1010	609
4	227	233	144	50	30	28	26	146	833	1080	1040	628
5	383	223	141	50	30	28	26	202	789	1150	1030	624
6	998	212	140	50	30	28	28	248	704	1150	1010	590
7	1160	202	139	50	30	28	28	265	632	1120	1060	579
8	1090	197	130	50	30	28	28	278	590	1060	1250	575
9	1050	185	130	50	30	28	28	283	560	993	1990	579
10	920	176	120	45	30	28	28	274	597	944	5210	594
11	741	166	120	45	30	28	28	265	655	916	5210	700
12	601	158	120	45	30	28	28	259	720	916	3910	911
13	507	151	110	45	30	28	28	255	716	897	3030	1320
14	428	147	110	45	30	28	28	257	704	874	3200	1600
15	366	147	110	45	30	26	28	257	737	860	3330	2000
16	447	147	100	40	30	26	28	259	754	828	3660	2100
17	1040	147	100	40	30	26	28	272	758	802	3150	1820
18	1180	143	100	40	30	26	28	265	729	810	2260	1500
19	930	128	90	40	30	26	28	267	708	810	1850	1600
20	700	121	90	40	30	26	30	274	696	833	1730	2270
21	524	116	90	40	30	26	30	276	659	869	1500	2340
22	410	112	80	35	28	26	30	274	640	888	1330	2390
23	360	108	80	35	28	26	30	278	679	944	1150	3050
24	437	107	80	35	28	26	30	287	741	1250	1050	2540
25	476	107	80	35	28	26	40	290	789	1740	998	1740
26	444	117	70	35	28	26	40	313	837	1670	988	1890
27	383	130	70	35	28	26	40	380	793	1400	988	1700
28	331	137	70	35	28	26	50	496	725	1180	988	1250
29	321	141	60	35	---	26	50	597	663	1050	940	928
30	299	143	60	35	---	26	50	620	640	974	851	996
31	265	---	60	30	---	26	---	601	---	920	763	---
TOTAL	17725	4815	3233	1335	826	834	942	8978	21345	31120	58360	40702
MEAN	572	161	104	43.1	29.5	26.9	31.4	290	712	1004	1883	1357
MAX	1180	244	147	60	30	28	50	620	837	1740	5210	3050
MIN	227	107	60	30	28	26	26	60	560	613	763	575
CFSM	10.6	2.98	1.93	.80	.55	.50	.58	5.37	13.2	18.6	34.9	25.1
IN.	12.21	3.32	2.23	.92	.57	.57	.65	6.18	14.70	21.44	40.20	28.04
AC-FT	35160	9550	6410	2650	1640	1650	1870	17810	42340	61730	115800	80730

CAL YR 1978 TOTAL 161528 MEAN 443 MAX 2990 MIN 30 CFSM 8.20 IN 111.27 AC-FT 320400
WTR YR 1979 TOTAL 190215 MEAN 521 MAX 5210 MIN 26 CFSM 9.65 IN 131.03 AC-FT 377300

NOTE.--No gage-height record Dec. 16 to Apr. 21.

15239900 ANCHOR RIVER NEAR ANCHOR POINT

LOCATION.--Lat 59°44'50", long 151°45'11", in NE¼ sec.13, T.5 S., R.15 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on left bank at downstream side of bridge on Sterling Highway, and 3.3 mi (5.3 km) southeast of Anchor Point.

DRAINAGE AREA.--137 mi^2 (355 km^2), revised.

PERIOD OF RECORD.--June 1964 to September 1973, annual maximum, water year 1974. September 1978 to current year.

REVISED RECORDS.--WSP 2136: 1965 (M).

GAGE.--Water-stage recorder. Datum of gage is 168.64 ft (51.401 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for Nov. 14 to Apr. 20, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--9 years, 184 ft^3/s (5.211 m^3/s), 18.23 in/yr (463 mm/yr), 133,300 acre-ft/yr (164 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,240 ft^3/s (63.4 m^3/s) May 15, 1973, gage height, 5.91 ft (1.801 m), from rating curve extended above 950 ft^3/s (27 m^3/s) on basis of slope-area and contracted-opening measurement at gage height 5.38 ft (1.640 m) and slope-area measurement of peak flow; maximum gage height, 10.86 ft (3.310 m) Dec. 3, 1978, backwater from ice; minimum daily discharge, about 28 ft^3/s (0.79 m^3/s) Jan. 1-31, 1969.

EXTREMES FOR CURRENT PERIOD.--September 1978: Maximum discharge during period, 302 ft^3/s (9.06 m^3/s), Sept. 5, gage height, 3.01 ft (0.917 m); minimum, 52 ft^3/s (1.47 m^3/s), Sept. 4, gage height, 2.09 ft (0.637 m).

Water year 1979: Maximum discharge, 1,190 ft^3/s (33.7 m^3/s) May 2, gage height, 4.56 ft (1.390 m), only peak above base of 800 ft^3/s (23 m^3/s); maximum gage height, 10.86 ft (3.310 m) Dec. 3, backwater from ice; minimum discharge, 56 ft^3/s (1.59 m^3/s), Sept. 5-13, gage height, 2.11 ft (0.643 m).

DISCHARGE, IN CUBIC FEET PER SECOND, SEPTEMBER 1978
MEAN VALUES

DAY	SEP	DAY	SEP	DAY	SEP	DAY	SEP	DAY	SEP	DAY	SEP
1	62	6	162	11	89	16	130	21	133	26	87
2	62	7	106	12	102	17	111	22	128	27	84
3	56	8	100	13	211	18	100	23	106	28	80
4	54	9	97	14	182	19	95	24	95	29	78
5	205	10	93	15	136	20	95	25	91	30	74

SEPTEMBER TOTAL - 3204 MEAN - 107 MAX - 211 MIN - 54 CFSM - .78 IN. - .87 AC-FT - 6360

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	266	210	125	80	75	120	947	218	106	91	62
2	72	240	210	125	75	75	130	1090	202	100	89	62
3	70	199	200	125	75	75	132	933	193	91	84	62
4	72	196	200	125	75	75	140	926	182	84	78	60
5	82	190	200	125	75	75	140	786	170	91	76	58
6	154	182	250	125	75	75	140	700	165	93	80	56
7	151	159	450	125	75	75	140	806	156	91	111	56
8	182	109	392	125	75	75	150	858	151	84	133	56
9	266	148	350	125	75	75	150	806	146	100	113	56
10	202	162	300	125	75	75	150	712	138	136	151	56
11	151	151	300	125	75	75	150	620	130	113	138	56
12	193	140	250	125	75	75	160	593	123	143	109	56
13	224	136	250	115	75	75	160	637	118	159	97	58
14	199	130	250	110	71	76	170	577	118	126	113	70
15	143	130	200	110	70	80	170	521	111	156	111	89
16	162	120	200	100	70	80	180	478	133	182	95	87
17	394	120	200	100	70	80	190	473	159	140	95	82
18	473	110	200	100	70	80	200	455	140	113	102	84
19	313	110	175	100	70	80	250	459	123	104	102	97
20	250	150	175	90	70	90	320	464	113	100	91	89
21	205	300	175	90	70	90	362	441	133	93	82	84
22	165	280	175	90	70	90	487	424	128	93	76	87
23	133	250	175	90	70	90	561	394	113	95	72	109
24	463	230	150	90	70	90	588	386	104	138	68	214
25	394	210	150	90	70	100	736	354	133	193	66	154
26	464	200	150	80	70	100	780	358	240	154	64	198
27	362	200	150	80	70	100	683	358	170	120	64	196
28	284	200	150	80	70	100	677	313	140	106	64	167
29	453	250	150	80	---	110	812	250	126	97	62	140
30	496	230	150	80	---	110	761	246	116	93	62	180
31	328	---	150	80	---	120	---	227	---	93	62	---
TOTAL	7572	5498	6687	3255	2031	2641	9789	17592	4392	3587	2801	2881
MEAN	244	183	216	105	72.5	85.2	326	567	146	116	90.4	96.0
MAX	496	300	450	125	80	120	812	1090	240	193	151	214
MIN	70	109	150	80	70	75	120	227	104	84	62	56
CFSM	1.78	1.34	1.58	.77	.53	.62	2.38	4.14	1.07	.85	.66	.70
IN.	2.06	1.49	1.82	.88	.55	.72	2.66	4.78	1.19	.97	.76	.78
AC-FT	15020	10910	13260	6460	4030	5240	19420	34890	8710	7110	5560	5710

WTR YR 1979 TOTAL 68726 MEAN 188 MAX 1090 MIN 56 CFSM 1.37 IN 18.66 AC-FT 136300

15241600 NINILCHIK RIVER AT NINILCHIK

LOCATION.--Lat 60°02'56", long 151°39'48", in NE¼ sec.34, T.1 S., R.14 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on downstream side of bridge at Ninilchik and 0.9 mi (1.4 km) upstream from mouth.

DRAINAGE AREA.--131 mi² (339 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1963 to current year.

GAGE.--Nonrecording gage. Altitude of gage is 30 ft (9 m), from topographic map. Prior to Oct. 1, 1965, at site 0.2 mi (0.3 km) upstream at different datum.

REMARKS.--Records fair except those for Nov. 9 to Apr. 17, which are poor.

AVERAGE DISCHARGE.--16 years, 104 ft³/s (2.945 m³/s), 10.78 in/yr (274 mm/yr), 7[illegible]0 acre-ft/yr (92.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,240 ft³/s (35.1 m³/s) Apr. 24, 1974, gage height, 6.04 ft (1.841 m), from graph based on gage readings; maximum gage height observed, 8.69 ft (2.649 m) Apr. 14, 1969, backwater from ice; minimum discharge observed, 30 ft³/s (0.85 m³/s) July 20, 1966, gage height, 3.64 ft (1.109 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge observed, 741 ft³/s (21.0 m³/s) Apr. 25, gage height, 5.94 ft (1.811 m); minimum observed, 44 ft³/s (1.2 m³/s) Aug. 5, gage height, 3.96 ft (1.207 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	125	90	80	60	60	100	408	80	80	56	56
2	60	103	90	80	60	60	100	349	77	77	56	56
3	59	87	90	76	60	60	105	324	77	70	54	56
4	59	86	90	75	60	60	110	306	71	65	51	56
5	57	84	90	75	60	60	110	270	75	62	44	54
6	57	75	90	75	60	60	110	249	78	59	54	54
7	60	70	90	75	60	60	110	221	78	57	82	54
8	87	67	92	75	56	60	120	237	75	57	82	54
9	121	70	90	75	56	60	120	267	70	62	77	52
10	99	70	90	70	56	65	120	243	67	57	71	52
11	86	70	90	70	56	65	130	234	65	56	67	52
12	103	70	90	70	56	64	130	213	60	62	60	52
13	153	70	90	70	56	65	140	197	59	80	60	56
14	160	70	85	70	56	65	140	192	57	77	68	60
15	127	70	85	70	56	65	150	169	59	119	62	68
16	105	70	85	70	56	70	154	157	78	148	62	64
17	187	70	85	65	56	70	180	174	95	113	71	62
18	174	80	85	65	60	70	223	150	89	103	71	60
19	150	80	85	65	60	70	246	143	80	77	68	59
20	125	80	85	65	60	70	226	167	75	68	68	60
21	99	80	85	65	60	80	267	157	68	62	65	65
22	86	80	85	65	60	80	318	145	70	60	64	75
23	93	80	85	65	60	80	360	136	65	62	64	85
24	105	80	80	65	60	80	498	157	60	84	64	80
25	99	80	80	65	60	80	741	143	93	95	62	80
26	127	80	80	60	60	90	691	133	121	89	62	85
27	153	80	80	60	60	90	578	119	105	71	62	95
28	133	90	80	60	60	90	494	109	107	65	60	127
29	125	90	80	60	---	90	412	99	101	57	60	125
30	153	90	80	60	---	100	377	91	78	57	58	113
31	136	---	80	60	---	100	---	87	---	56	58	---
TOTAL	3394	2397	2662	2121	1640	2239	7560	6046	2333	2307	1963	2067
MEAN	109	79.9	85.9	68.4	58.6	72.2	252	195	77.8	74.4	63.3	68.9
MAX	187	125	92	80	60	100	741	408	121	148	82	127
MIN	56	67	80	60	56	60	100	87	57	56	44	52
CFSM	.83	.61	.66	.52	.45	.55	1.92	1.49	.59	.57	.48	.53
IN.	.96	.68	.76	.60	.47	.64	2.15	1.72	.66	.66	.56	.59
AC-FT	6730	4750	5280	4210	3250	4440	15000	11990	4630	4580	3890	4100

CAL YR 1978 TOTAL 35734 MEAN 97.9 MAX 450 MIN 44 CFSM .75 IN 10.15 AC-FT 70880
WTR YR 1979 TOTAL 36729 MEAN 101 MAX 741 MIN 44 CFSM .77 IN 10.43 AC-FT 72850

NOTE.--No gage-height record Nov. 24 to Mar. 22.

15241600 NINILCHIK RIVER AT NINILCHIK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1952-53, 1955-58, 1963-65, 1967-68, 1975, and 1978-79.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)
MAR 12...	1315	64	130	.0	42	0	9.3	4.6	9.0	2.4	3.3
MAY 14...	1100	192	60	5.5	24	6	6.3	2.0	4.1	1.2	5.2

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
MAR 12...	2.6	.1	37	93	105	.19	.04	1400	850	550	150
MAY 14...	2.1	.1	20	63	52	.06	.04	1200	900	300	50

15258000 KENAI RIVER AT COOPER LANDING

LOCATION.--Lat 60°29'34", long 149°48'28", in SE¼ sec.28, T.5 N., R.3 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, Chugach National Forest, near center of span on upstream side of bridge on Sterling Highway, 0.9 mi (1.4 km) east (upstream) of Cooper Landing, Bean Creek, and Kenai Lake outlet.
DRAINAGE AREA.--634 mi^2 (1,642 km^2).
PERIOD OF RECORD.--May 1947 to current year.
REVISED RECORDS.--WSP 2136: 1964 (M).
GAGE.--Nonrecording gage. Altitude of gage is 419.92 ft (127.992 m) National Geodetic Vertical Datum of 1929, (levels by Alaska Department of Transportation). See WSP 2136 for history of changes prior to Aug. 28, 1965. Aug. 28, 1965 to Jan. 21, 1974 at site 30 ft (9 m) downstream at present datum.
REMARKS.--Records good. Diversion from Cooper Lake to Kenai Lake above gage through Cooper Lake powerplant began May 1961.
COOPERATION.--Records of diversion furnished by Chugach Electric Association.
AVERAGE DISCHARGE.--32 years, 2,744 ft^3/s (77.71 m^3/s), 58.78 in/yr (1,493 mm/yr), 1,988,000 acre-ft/yr (2.45 km^3/yr), adjusted to exclude diversion from Cooper Lake.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,100 ft^3/s (654 m^3/s) Sept. 21, 1974, gage height, 17.18 ft (5.236 m), result of release of stored water from glacier-dammed lake at head of unnamed glacier in the Snow River basin; no flow Mar. 27, 28, 1964, caused by earthquake.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,700 ft^3/s (331 m^3/s) Aug. 17, gage height, 13.25 ft (4.039 m); minimum daily, 350 ft^3/s (9.91 m^3/s) Mar. 3-11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3340	2710	1210	830	580	360	389	850	3380	5390	6850	5270
2	3030	2580	1180	815	540	360	392	980	3690	5260	6650	4810
3	2910	2540	1180	795	540	350	404	1130	3940	5480	6630	4570
4	2790	2380	1170	785	500	350	404	1280	4230	5900	6590	4350
5	2790	2270	1160	785	500	350	392	1480	4560	6490	6590	4160
6	3040	2190	1150	770	480	350	410	1720	4640	7050	6650	3980
7	3400	2090	1180	770	480	350	401	1840	4650	7180	6630	3790
8	3990	2060	1160	760	460	350	404	1990	4590	7130	6790	3680
9	4770	1970	1160	745	440	350	400	2110	4430	7030	7050	3580
10	5000	1900	1140	745	420	350	400	2130	4370	6890	8300	3510
11	5100	1870	1180	710	420	350	400	2180	4450	6830	9850	3480
12	4980	1780	1150	730	400	360	390	2230	4540	6850	10400	3590
13	4670	1720	1100	735	400	360	390	2270	4640	6950	9940	3660
14	4400	1670	1060	720	380	360	390	2300	4730	6990	9700	4920
15	4230	1580	1030	700	380	360	380	2330	4830	7090	10400	6650
16	3980	1540	1020	700	380	360	383	2350	4830	7110	10500	7300
17	3990	1480	1110	700	380	360	383	2330	4860	7050	11700	7260
18	4080	1450	1000	700	370	360	389	2280	4810	6970	11600	7130
19	4050	1430	1010	700	370	365	380	2290	4800	6990	10700	6930
20	3890	1370	1010	700	370	371	390	2290	4800	6910	10100	6830
21	3730	1370	980	700	370	383	392	2240	4780	6950	9420	7580
22	3510	1340	976	680	370	401	404	2260	4810	6890	8960	7470
23	3470	1330	946	680	360	389	422	2250	4930	6850	8230	7940
24	3420	1280	930	680	360	389	444	2230	5100	6850	7510	8380
25	3390	1240	930	645	360	389	476	2260	5220	7280	7220	8450
26	3250	1250	900	632	360	401	516	2320	5560	7620	6930	7790
27	3100	1240	900	624	360	371	572	2430	5700	7970	6710	7220
28	3030	1250	895	604	360	389	572	2620	5770	7680	6470	7110
29	3020	1230	880	612	---	392	720	2810	5720	7390	6220	6650
30	2920	1230	855	612	---	401	770	3070	5570	7320	5880	6260
31	2830	---	820	592	---	401	---	3180	---	7090	5590	---
TOTAL	114100	51340	32372	21956	11690	11432	13159	66030	142930	213430	252760	174300
MEAN	3681	1711	1044	708	418	369	439	2130	4764	6885	8154	5810
MAX	5100	2710	1210	830	580	401	770	3180	5770	7970	11700	8450
MIN	2790	1230	820	592	360	350	380	850	3380	5260	5590	3480
AC-FT	226300	101800	64210	43550	23190	22680	26100	131000	283500	423300	501300	345700

CAL YR 1978 TOTAL 1085064 MEAN 2973 MAX 12700 MIN 520 AC-FT 2152000
WTR YR 1979 TOTAL 1105499 MEAN 3029 MAX 11700 MIN 350 AC-FT 2193000

ADJUSTED TO EXCLUDE DIVERSION FROM COOPER LAKE

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3,475	1,573	929	625	385	329	410	2,090	4,732	6,804	8,023	5,749
CFSM	5.48	2.48	1.47	0.99	0.61	0.52	0.65	3.30	7.46	10.73	12.66	9.07
IN	6.32	2.77	1.69	1.14	0.63	0.60	0.72	3.80	8.33	12.37	14.59	10.12
AC-FT	213,700	93,600	57,100	38,420	21,400	20,200	24,400	128,500	281,600	418,400	493,300	342,100

CAL YR 1978 MEAN 2,835 CFSM 4.47 IN 60.70 AC-FT 2,053,000
WTR YR 1979 MEAN 2,946 CFSM 4.65 IN 63.07 AC-FT 2,133,000

15266300 KENAI RIVER AT SOLDOTNA

LOCATION.--Lat 60°28'39", long 151°04'46", Kenai Peninsula Borough, Hydrologic Unit 19050002, near center of span on downstream side of bridge on Sterling Highway, 1.0 mi (1.6 km) southwest of Soldotna.

DRAINAGE AREA.--2,010 mi^2 (5,210 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1965 to current year.

GAGE.--Nonrecording gage. Datum of gage is 35.34 ft (10.772 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for Dec. 15 to Apr. 18, which are poor.

AVERAGE DISCHARGE.--14 years, 5,642 ft^3/s (159.8 m^3/s), 38.12 in/yr (968 mm/yr), 4,088,000 acre-ft/yr (5.04 km^3/yr)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,700 ft^3/s (954 m^3/s) Sept. 9, 1977, gage height, 13.45 ft (4.100 m), from graph based on gage readings; maximum gage height, 22.62 ft (6.895 m) Jan. 18, 1969, backwater from ice; minimum daily discharge, 770 ft^3/s (21.8 m^3/s) Apr. 1-4, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 26,800 ft^3/s (759 m^3/s) Aug. 18, gage height, 12.30 ft (3.749 m); minimum daily, about 800 ft^3/s (23 m^3/s) Feb. 16-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7480	4950	2360	1500	950	825	925	2250	4620	9540	15800	12900
2	7060	4800	2280	1500	950	825	925	2340	5200	9540	15200	12200
3	6700	4500	2240	1500	950	825	950	2340	5350	9780	15100	11500
4	6400	4500	2200	1400	950	825	950	2340	5410	10400	14900	10900
5	6100	4450	2180	1400	900	825	975	2440	5650	11200	14700	10300
6	5950	4220	2250	1400	900	825	975	2480	5800	11800	14600	9780
7	6490	4100	2140	1400	900	825	1000	2540	5950	12200	14500	9140
8	6340	3780	2180	1400	900	825	1000	2700	6100	12300	14800	8700
9	6880	3650	2180	1300	900	825	1050	2900	6250	12500	14800	8350
10	6940	3580	2120	1300	900	850	1050	2900	6370	12700	16000	8140
11	6940	3520	2080	1300	850	850	1100	2980	6640	12900	18800	8020
12	7060	3480	2070	1300	850	850	1150	3020	7150	13300	20800	7960
13	7000	3320	2020	1300	850	850	1200	3100	7300	13800	22300	8140
14	7000	3200	2000	1200	850	850	1250	3160	7360	13700	23000	8500
15	6790	3000	1900	1200	840	850	1300	3250	7420	14100	24700	9900
16	6790	2860	1900	1200	800	850	1400	3350	7600	14600	25000	10900
17	6970	2800	1900	1200	800	850	1500	3300	8020	14600	26500	11700
18	7210	2640	1800	1200	800	850	1600	3350	7900	14300	26800	12300
19	6940	2600	1800	1100	800	875	1770	3350	7900	14200	26500	13000
20	6700	2600	1800	1100	800	875	1880	3350	7900	14500	25700	13700
21	6550	2680	1800	1100	800	875	1960	3450	8020	14400	24100	14500
22	6400	2680	1700	1100	800	875	2100	3450	8020	14400	22900	14800
23	6010	2600	1700	1100	800	875	2260	3450	8020	14400	21600	15600
24	6550	2520	1700	1100	800	875	2300	3450	8200	14700	20400	15900
25	6100	2420	1700	1000	800	900	2440	3500	8460	15200	19200	15900
26	5830	2500	1600	1000	800	900	2370	3500	9300	15500	18000	15900
27	5680	2400	1600	1000	800	900	2320	3620	9380	15800	17000	15500
28	5470	2400	1600	1000	800	900	2250	3850	9460	15800	16100	15300
29	5410	2360	1600	1000	---	900	2200	4120	9780	15900	15100	14700
30	5150	2320	1500	950	---	900	2200	4400	9620	16000	14400	13900
31	5080	---	1500	950	---	900	---	4400	---	16000	13600	---
TOTAL	199970	97430	59400	37560	23840	26625	46350	98630	220150	420060	592900	357950
MEAN	6451	3248	1916	1210	851	859	1545	3182	7338	13550	19130	11930
MAX	7480	4950	2360	1500	950	900	2440	4400	9780	16000	26800	15900
MIN	5080	2320	1500	950	800	825	925	2250	4620	9540	13600	7960
CFSM	3.21	1.62	.95	.60	.42	.43	.77	1.58	3.65	6.74	9.52	5.94
IN.	3.70	1.80	1.10	.69	.44	.49	.86	1.83	4.07	7.77	10.97	6.62
AC-FT	396600	193300	117800	74380	47290	52810	91940	195600	436700	833200	1176000	710000

CAL YR 1978 TOTAL 1988430 MEAN 5448 MAX 16300 MIN 1140 CFSM 2.71 IN 36.80 AC-FT 3944000
WTR YR 1979 TOTAL 2180805 MEAN 5975 MAX 26800 MIN 800 CFSM 2.97 IN 40.36 AC-FT 4326000

NOTE.--No gage-height record Dec. 20 to Apr. 10.

15266300 KENAI RIVER AT SOLDOTNA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1952-53, 1955-58, 1966-71, 1977, and 1979.

REMARKS.--Results of daily sediment sampling after Aug. 23 will be published next year.

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
AUG				
23...	1435	21400	22	1270
29...	1540	14900	12	483
SEP				
13...	1245	8050	8	174

15266895 BERNICE LAKE NEAR KENAI

LOCATION.--Lat 60°41'37", long 151°21'4[illegible]", in SE¼ sec.15, T.7 N., R.12 W., Kenai Peninsula Borough, Hydrologic Unit 1905002, at campground on south side of lake, and 10 mi (16.1 km) northwest of Kenai.

DRAINAGE AREA.--Not applicable. Lake level may be controlled primarily by ground-water level fluctuations rather than surface inflow.

PERIOD OF RECORD.--Lake-level measurements once or twice yearly, water years 1970-72 and 1974-76. June 1977 to September 1979 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1977, water levels from reference mark at datum 57.92 ft (17.654 m) higher.

REMARKS.--Records good. Record for the period, Feb. 2 to Mar. 20, not published due to questionable ice effect. Recorder malfunctioned Aug. 1-8. Surface area of lake is 146 acres or 0.23 mi^2 (0.59 km^2).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 76.51 ft (23.320 m) Nov. 22, 1978; minimum observed elevation, 74.56 ft (22.726 m) July 13, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 76.13 ft (23.204 m) Dec. 23; minimum elevation, 75.34 ft (22.964 m) Oct. 1-3

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75.34	75.65	75.80	76.09	76.00	---	75.72	75.92	75.80	75.65	---	75.56
2	75.34	75.64	75.82	76.08	---	---	75.71	75.92	75.80	75.65	---	75.57
3	75.34	75.63	75.83	76.07	---	---	75.75	75.91	75.79	75.64	---	75.56
4	75.35	75.62	75.83	76.06	---	---	75.80	75.89	75.77	75.63	---	75.56
5	75.35	75.63	75.83	76.05	---	---	75.81	75.90	75.78	75.64	---	75.53
6	75.35	75.63	75.92	76.03	---	---	75.81	75.90	75.75	75.66	---	75.56
7	75.36	75.63	75.98	76.02	---	---	75.81	75.89	75.71	75.67	---	75.55
8	75.38	75.63	75.98	76.02	---	---	75.80	75.90	75.70	75.67	---	75.55
9	75.40	75.62	75.99	76.02	---	---	75.80	75.91	75.70	75.70	75.59	75.53
10	75.41	75.62	75.98	76.02	---	---	75.80	75.91	75.70	75.70	75.57	75.54
11	75.40	75.62	75.97	76.01	---	---	75.80	75.91	75.70	75.69	75.58	75.53
12	75.38	75.62	75.98	76.00	---	---	75.80	75.91	75.69	75.69	75.58	75.53
13	75.39	75.61	75.98	76.00	---	---	75.80	75.90	75.67	75.69	75.58	75.52
14	75.38	75.61	75.96	75.99	---	---	75.80	75.88	75.65	75.69	75.59	75.56
15	75.38	75.62	75.95	75.99	---	---	75.80	75.88	75.64	75.73	75.60	75.57
16	75.39	75.61	75.94	75.99	---	---	75.79	75.88	75.65	75.75	75.62	75.60
17	75.44	75.60	75.97	75.99	---	---	75.79	75.87	75.65	75.77	75.65	75.59
18	75.47	75.60	76.05	75.98	---	---	75.79	75.88	75.65	75.79	75.67	75.60
19	75.47	75.60	76.06	75.97	---	---	75.80	75.85	75.64	75.78	75.65	75.61
20	75.47	75.62	76.06	75.97	---	---	75.81	75.86	75.64	75.76	75.63	75.62
21	75.47	75.69	76.06	75.98	---	75.68	75.82	75.87	75.64	75.77	75.63	75.64
22	75.46	75.73	76.10	75.99	---	75.73	75.82	75.84	75.64	75.76	75.61	75.67
23	75.46	75.72	76.13	75.99	---	75.76	75.82	75.83	75.64	75.75	75.62	75.70
24	75.51	75.71	76.12	75.99	---	75.76	75.84	75.84	75.62	75.79	75.62	75.74
25	75.52	75.74	76.10	75.99	---	75.76	75.86	75.84	75.67	75.82	75.61	75.74
26	75.55	75.76	76.10	75.98	---	75.75	75.88	75.83	75.72	75.82	75.59	75.73
27	75.55	75.76	76.10	75.98	---	75.75	75.88	75.83	75.71	75.83	75.58	75.76
28	75.55	75.78	76.10	75.99	---	75.75	75.90	75.83	75.70	75.83	75.59	75.80
29	75.59	75.80	76.10	75.98	---	75.73	75.91	75.84	75.67	75.83	75.59	75.80
30	75.61	75.80	76.10	75.97	---	75.72	75.91	75.83	75.65	75.83	75.57	75.80
31	75.63	---	76.09	75.97	---	75.72	---	75.82	---	---	75.57	---
MEAN	75.44	75.66	76.00	76.01	---	---	75.81	75.87	75.69	---	---	75.62
MAX	75.63	75.80	76.13	76.09	---	---	75.91	75.92	75.80	---	---	75.80
MIN	75.34	75.60	75.80	75.97	---	---	75.71	75.82	75.62	---	---	75.52

15267000 BISHOP CREEK NEAR KENAI

LOCATION.--Lat 60°46'35", long 151°05'46", in NW¼NE¼ sec.19, T.8 N., R.10 W., Kenai Peninsula Borough, on right bank 20 ft (6 m) upstream from culvert entrance on North Kenai Road at mile 35.1 (56.6 km) and 1.4 mi (2.3 km) upstream from mouth at Cook Inlet.

DRAINAGE AREA.--24.2 mi² (62.7 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1977 to September 1979 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 45 ft (13.7 m), from topographic map.

REMARKS.--Records fair except those for Mar. 25 to May 20, which are poor. Discharge affected by storage in the many small lakes and swamps which comprise a major portion of the drainage area.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 150 ft³/s (4.25 m³/s) Apr. 29, 1979, maximum observed gage height, 3.96 ft (1.207 m) Apr. 29, 1977, backwater from ice; minimum discharge, 4.2 ft³/s (0.12 m³/s) June 11, 1978, gage height 0.51 ft (0.155 m).

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 150 ft³/s (4.25 m³/s) Apr. 29, maximum observed gage height, 3.61 ft (1.100 m) Apr. 23, backwater from ice; minimum discharge, 12 ft³/s (0.34 m³/s) Sept. 9, 11, and 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	35	33	22	18	16	20	140	31	27	19	15
2	19	32	32	22	18	16	20	135	30	25	19	15
3	18	30	32	22	18	16	20	132	29	24	17	14
4	19	29	31	22	18	16	20	130	28	23	17	14
5	19	28	31	22	18	16	20	130	28	24	17	13
6	19	26	30	21	18	16	20	120	27	23	17	13
7	19	25	29	21	18	16	20	120	26	22	18	14
8	22	25	29	21	18	16	25	110	25	21	19	14
9	25	25	29	21	18	16	25	110	24	21	19	13
10	25	26	28	21	18	16	25	100	23	20	19	13
11	25	26	28	21	18	16	25	100	22	19	19	13
12	25	27	28	20	18	16	25	90	21	19	19	13
13	26	27	27	20	18	16	25	90	20	19	19	13
14	27	26	27	20	17	16	30	80	19	19	19	16
15	26	25	27	20	17	16	30	80	18	22	19	19
16	25	25	26	20	17	16	35	80	19	23	21	19
17	28	26	26	20	17	16	40	70	20	23	21	19
18	32	28	26	20	17	16	45	70	20	23	22	20
19	32	30	25	20	17	16	50	60	19	23	22	22
20	32	32	25	20	17	16	60	60	20	23	21	22
21	32	34	25	19	17	15	70	56	20	22	21	23
22	30	35	25	19	17	16	80	50	20	21	20	22
23	30	34	24	19	17	16	87	48	19	21	20	24
24	30	34	24	19	17	16	95	47	19	22	19	29
25	30	32	24	19	17	16	110	46	22	22	19	30
26	32	34	24	19	17	16	120	42	30	22	18	29
27	34	36	23	19	17	16	130	40	27	21	18	31
28	34	36	23	19	17	18	140	38	28	20	17	40
29	35	35	23	19	---	18	150	35	29	19	17	43
30	39	34	23	19	---	18	145	34	28	19	17	42
31	37	---	23	19	---	18	---	32	---	20	16	---
TOTAL	845	897	830	625	489	503	1707	2475	711	672	585	627
MEAN	27.3	29.9	26.8	20.2	17.5	16.2	56.9	79.8	23.7	21.7	18.9	20.9
MAX	39	36	33	22	18	18	150	140	31	27	22	43
MIN	18	25	23	19	17	15	20	32	18	19	16	13
CFSM	1.13	1.24	1.11	.84	.72	.67	2.35	3.30	.98	.90	.78	.86
IN.	1.30	1.38	1.28	.96	.75	.77	2.62	3.80	1.09	1.03	.90	.96
AC-FT	1680	1780	1650	1240	970	998	3390	4910	1410	1330	1160	1240

CAL YR 1978 TOTAL 7987.4 MEAN 21.9 MAX 60 MIN 4.8 CFSM .91 IN 12.28 AC-FT 15840
WTR YR 1979 TOTAL 10966.0 MEAN 30.0 MAX 150 MIN 13 CFSM 1.24 IN 16.86 AC-FT 21750

NOTE.--No gage-height record Dec. 15 to May 22.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1968-70 and 1978-79.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1977 to September 1979 (discontinued)

INSTRUMENTATION.--Specific conductance recorder since Nov. 2, 1977.

REMARKS.--No record Mar. 21 to Apr. 5 due to recorder malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 152 micromhos/cm Mar. 8-10, 1979; minimum, 46 micromhos/cm Apr. 27-30, 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 152 micromhos/cm Mar. 8-10; minimum, 46 micromhos/cm Apr. 27-30.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)
NOV										
01...	1530	32	90	7.2	1.0	13.0	93	741	47	0
DEC										
06...	1300	30	104	6.0	.9	6.6	45	761	51	0
FEB										
13...	1520	18	120	6.4	.0	--	--	--	67	0
JUN										
20...	1015	20	105	6.5	14.5	--	--	--	53	0
AUG										
09...	1130	19	110	7.2	16.0	--	--	--	61	0
SEP										
18...	1630	20	110	6.7	12.0	--	--	--	43	0

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	108	103	89	88	100	99	93	92	103	103	140	140
2	104	103	88	79	99	88	93	92	105	103	142	140
3	104	103	96	86	98	97	94	78	105	104	145	142
4	108	103	95	91	98	97	94	93	105	104	146	145
5	109	103	92	91	97	96	95	94	105	105	147	146
6	105	103	92	90	97	92	95	95	105	105	149	147
7	105	103	92	90	93	91	95	95	105	105	151	149
8	105	103	96	92	95	91	97	95	105	105	152	151
9	104	102	98	95	94	91	99	80	105	105	152	152
10	103	102	99	80	92	91	100	80	110	105	152	147
11	102	102	99	98	92	90	98	76	110	110	145	138
12	102	102	98	97	92	90	98	76	110	110	138	135
13	102	102	97	96	91	90	98	78	112	110	135	132
14	102	97	100	80	91	90	98	76	114	103	133	132
15	98	76	108	100	98	90	100	98	117	114	132	129
16	98	97	108	105	92	85	99	98	119	117	130	129
17	98	96	113	108	96	92	99	98	122	119	133	130
18	96	94	115	113	98	96	100	99	123	122	135	133
19	94	93	115	114	98	96	99	99	123	122	138	135
20	94	93	114	102	96	94	99	99	124	123	138	137
21	94	92	112	106	96	95	102	99	126	125	---	---
22	93	92	106	102	95	93	102	102	127	126	---	---
23	94	92	103	102	93	92	103	102	127	127	---	---
24	95	93	102	102	92	91	108	103	127	127	---	---
25	94	91	105	102	92	91	105	104	134	127	---	---
26	92	91	105	103	92	92	104	103	135	134	---	---
27	92	91	103	102	92	91	108	103	137	137	---	---
28	92	91	102	101	91	91	103	102	140	137	---	---
29	91	90	101	100	92	91	103	102	---	---	---	---
30	90	89	101	100	92	91	103	102	---	---	---	---
31	89	88	---	---	93	92	108	103	---	---	---	---
MONTH	108	76	115	79	100	80	108	76	140	103		

15267000 BISHOP CREEK NEAR KENAI--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	48	47	96	96	93	91	105	102	109	108
2	---	---	49	48	97	96	96	94	105	102	109	107
3	---	---	50	49	97	97	98	96	105	103	109	107
4	---	---	50	49	100	97	99	97	105	103	109	107
5	118	106	51	48	100	98	100	99	107	104	108	107
6	108	104	53	51	100	98	100	99	107	105	108	108
7	105	104	53	51	100	99	101	100	108	105	108	106
8	105	104	55	52	101	99	101	101	108	106	108	107
9	108	101	53	50	103	101	102	101	109	98	108	107
10	109	104	54	50	102	102	102	102	109	105	110	108
11	105	102	58	53	102	101	103	102	107	106	110	108
12	102	101	60	58	104	102	104	103	109	106	111	110
13	104	102	66	59	107	102	106	103	110	106	112	111
14	102	99	66	64	107	103	106	103	111	107	113	111
15	102	98	68	65	108	104	105	102	111	107	113	111
16	98	98	71	68	107	103	103	100	108	107	112	109
17	98	91	74	58	108	104	101	100	110	106	111	109
18	92	89	76	58	105	103	102	101	107	105	110	107
19	90	81	77	76	106	103	103	102	108	104	110	108
20	81	79	78	77	106	102	105	103	107	105	109	106
21	79	78	80	78	103	102	105	104	106	104	106	104
22	79	67	81	79	103	98	106	105	107	105	105	103
23	67	66	82	80	103	102	107	105	107	105	103	100
24	66	60	84	81	103	102	106	105	107	106	102	98
25	60	50	85	83	103	95	107	103	108	106	99	96
26	50	49	90	85	95	89	105	103	108	107	98	95
27	49	46	93	87	90	88	105	102	109	107	95	92
28	49	46	95	91	90	86	105	102	109	108	91	88
29	46	46	95	92	90	88	105	103	111	108	88	86
30	47	46	96	94	91	90	105	103	110	108	91	86
31	---	---	97	96	---	---	105	103	110	108	---	---
MONTH			97	47	108	86	107	91	111	98	113	86

15267900 RESURRECTION CREEK NEAR HOPE

LOCATION.--Lat 60°53'40", long 149°38'13", in SW¼SE¼ sec.4, T.9 N., R.3 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, Chugach National Forest, on right bank 2.1 mi (3.4 km) upstream from mouth on south shore of Turnagain Arm and 1.8 mi (2.9 km) south of Hope.

DRAINAGE AREA.--149 mi² (386 km²).

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 180 ft (55 m), from topographic map.

REMARKS.--Records fair except those for Nov. 1 to Apr. 27, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--12 years, 260 ft³/s (7.363 m³/s), 23.70 in/yr (602 mm/yr), 188,400 acre-ft/yr (232 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,700 ft³/s (76.5 m³/s) Oct. 6, 1969, gage height, 8.40 ft (2.560 m); maximum gage height, 8.96 ft (2.731 m) June 18, 1977; minimum daily discharge, 46 ft³/s (1.30 m³/s) Mar. 26 to Apr. 13, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft³/s (23 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 28	2230	814	23.1	7.81	2.380	June 25	2230	*1,010	28.6	*8.06	2.457
June 2	0130	929	26.3	7.96	2.426	July 5	2000	911	25.8	7.93	2.417
June 12	0630	839	23.8	7.85	2.393	July 15	0530	902	25.5	7.92	2.414

Minimum daily discharge, 58 ft³/s (1.64 m³/s) Apr. 2-7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	266	190	150	100	75	65	60	456	840	688	487	239
2	266	190	150	100	70	65	58	491	888	709	486	230
3	246	190	150	90	70	65	58	492	847	780	457	226
4	242	190	150	90	70	65	58	539	828	823	438	220
5	238	190	149	90	70	65	58	504	790	858	424	211
6	282	190	140	90	70	65	58	460	735	819	427	204
7	270	180	140	90	70	65	58	444	720	772	424	197
8	405	180	140	90	70	65	60	424	699	738	397	197
9	460	180	140	90	70	60	60	394	695	705	386	193
10	415	180	140	90	70	60	60	381	739	680	389	194
11	382	180	130	80	70	60	60	388	791	670	374	186
12	358	180	130	80	68	60	60	412	825	756	357	189
13	354	170	130	80	65	60	65	431	795	730	347	201
14	330	170	130	80	65	60	65	439	746	727	363	195
15	314	170	130	80	65	60	65	419	742	846	366	187
16	302	170	120	80	65	60	70	417	753	804	413	178
17	322	170	120	80	65	60	70	396	730	750	420	195
18	322	170	120	80	65	60	75	380	706	715	382	189
19	302	170	120	80	65	60	75	379	684	722	362	197
20	290	160	120	80	65	60	80	386	693	691	352	228
21	278	160	120	80	65	60	80	393	688	686	334	255
22	266	160	110	75	65	60	90	401	678	647	320	271
23	254	160	110	75	65	60	90	420	710	623	307	295
24	278	160	110	75	65	60	103	443	742	646	300	286
25	266	160	110	75	65	60	120	476	837	620	294	260
26	250	160	110	75	65	60	150	544	872	604	283	242
27	234	150	100	75	65	60	180	629	795	574	275	309
28	221	150	100	75	65	60	214	720	799	556	266	351
29	227	150	100	75	---	60	247	783	731	540	277	293
30	221	150	100	75	---	60	323	757	706	523	277	443
31	191	---	100	75	---	60	---	744	---	500	252	---
TOTAL	9052	5130	3869	2550	1883	1900	2870	14942	22804	21502	11236	7061
MEAN	292	171	125	82.3	67.3	61.3	95.7	482	760	694	362	235
MAX	460	190	150	100	75	65	323	783	888	858	487	443
MIN	191	150	100	75	65	60	58	379	678	500	252	178
CFSM	1.96	1.15	.84	.55	.45	.41	.64	3.24	5.10	4.66	2.43	1.58
IN.	2.26	1.28	.97	.64	.47	.47	.72	3.73	5.69	5.37	2.81	1.76
AC-FT	17950	10180	7670	5060	3730	3770	5690	29640	45230	42650	22290	14010

CAL YR 1978 TOTAL 88209 MEAN 242 MAX 830 MIN 60 CFSM 1.62 IN 22.02 AC-FT 175000
WTR YR 1979 TOTAL 104799 MEAN 287 MAX 888 MIN 58 CFSM 1.93 IN 26.16 AC-FT 207900

NOTE.--No gage-height record Nov. 1 to Apr. 1.

15271000 SIXMILE CREEK NEAR HOPE

LOCATION.--Lat 60°49'52", long 149°25'24", in NE¼NE¼ sec.34, T.8 N., R.1 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, Chugach National Forest, on left bank 5.2 mi (8.3 km) upstream from mouth at Turnagain Arm and 9.5 mi (15.3 km) southeast of Hope.

DRAINAGE AREA.--235 mi^2 (609 km^2).

PERIOD OF RECORD.--June to September 1979.

GAGE.--Water-stage recorder. Altitude of gage is 250 ft (76 m), from topographic map.

REMARKS.--Records good. Records available downstream at Sunrise (Station No. 15272000) for August to November 1913.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period June to September, 5,990 ft^3/s (170 m^3/s) Sept. 30, stage rising, from rating curve extended above 2,500 ft^3/s (71 m^3/s) on basis of slope-area measurement at gage height 17.62 ft (5.371 m), for peak of 6,400 ft^3/s (181 m^3/s) on Oct. 1, 1979; maximum peak discharge, 3,380 ft^3/s (95.7 m^3/s) July 4, gage height, 11.78 ft (3.591 m); minimum discharge, 523 ft^3/s (14.8 m^3/s) Sept. 9, gage height, 6.72 ft (2.048 m).

DISCHARGE, IN CUBIC FEET PER SECOND, JUNE TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									2740	1670	1070	629
2									2860	2180	1130	611
3									2680	3090	1160	603
4									2850	3200	1150	585
5									2510	3040	1110	573
6									2120	2650	1130	552
7									2020	2240	1160	551
8									1800	1970	1090	549
9									1870	1800	1250	542
10									2350	1760	1580	547
11									2640	1800	1320	595
12									2770	2120	1140	754
13									2480	2030	1050	1220
14									1990	1950	1300	1120
15									2120	2420	1390	898
16									2230	1970	1880	769
17									1980	1670	1840	801
18									1900	1680	1310	735
19									1890	1680	1180	783
20									1940	1640	1110	917
21									1920	1620	988	956
22									2080	1430	932	1040
23									2530	1400	921	1330
24									2760	1700	921	1160
25									2830	1630	913	992
26									2850	1450	888	911
27									2170	1330	856	1160
28									1840	1250	798	1270
29									1600	1240	800	1100
30									1540	1190	766	2800
31									---	1110	675	---
TOTAL	---	---	---	---	---	---	---	---	67860	57910	34808	27053
MEAN	---	---	---	---	---	---	---	---	2262	1868	1123	902
MAX	---	---	---	---	---	---	---	---	2860	3200	1880	2800
MIN	---	---	---	---	---	---	---	---	1540	1110	675	542
CFSM	---	---	---	---	---	---	---	---	9.63	7.95	4.78	3.84
IN.	---	---	---	---	---	---	---	---	10.74	9.17	5.51	4.28
AC-FT	---	---	---	---	---	---	---	---	134600	114900	69040	53660

15273050 RABBIT CREEK AT ANCHORAGE

LOCATION.--Lat 61°04'54", long 149°49'30", in SW¼SW¼ sec.33, T.12 N., R.3 W., Municipality of Anchorage, Hydrologic Unit 19050002, on right bank 0.2 mi (0.3 km) downstream from Old Seward Highway, 0.5 mi (0.8 km) upstream from Little Rabbit Creek, and 9.5 mi (15 km) south of Anchorage Post Office.

DRAINAGE AREA.--15 mi^2 (39 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May to September 1979.

GAGE.--Water-stage recorder. Altitude of gage is 42 ft (13 m), from topographic map.

REMARKS.--Record fair.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period May to September, 130 ft^3/s (3.68 m^3/s), June 27, gage height, 1.18 ft (0.360 m); minimum, 12 ft^3/s (0.34 m^3/s), Sept. 16, gage height, 0.35 ft (0.107 m).

DISCHARGE, IN CUBIC FEET PER SECOND, MAY TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								30	45	66	25	17
2								30	55	59	26	17
3								30	51	54	24	17
4								31	44	51	24	17
5								31	36	51	24	16
6								30	34	51	24	16
7								29	28	44	24	16
8								27	27	41	24	16
9								26	27	34	24	16
10								25	27	31	24	15
11								24	26	30	24	14
12								24	46	34	23	14
13								26	54	34	22	14
14								30	36	34	22	14
15								26	36	42	24	14
16								26	36	42	24	13
17								25	35	41	25	14
18								24	32	39	23	14
19								24	32	38	21	14
20								25	33	36	20	18
21								25	33	35	19	30
22								26	32	34	19	28
23								27	32	33	18	26
24								27	33	33	17	27
25								28	47	33	17	26
26								32	70	32	17	24
27								34	92	29	19	26
28								38	94	28	18	27
29								47	104	27	19	22
30								42	80	27	20	22
31								41	---	26	18	---
TOTAL	---	---	---	---	---	---	---	910	1357	1189	672	564
MEAN	---	---	---	---	---	---	---	29.4	45.2	38.4	21.7	18.8
MAX	---	---	---	---	---	---	---	47	104	66	26	30
MIN	---	---	---	---	---	---	---	24	26	26	17	13
CFSM	---	---	---	---	---	---	---	1.96	3.01	2.56	1.45	1.25
IN.	---	---	---	---	---	---	---	2.26	3.37	2.95	1.67	1.40
AC-FT	---	---	---	---	---	---	---	1800	2690	2360	1330	1120

15273050 RABBIT CREEK AT ANCHORAGE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1979.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)
AUG 08...	1300	25	75	6.8	17.0	9.5	10.9	111	764	31	0
SEP 10...	1300	15	75	6.8	17.5	7.5	11.9	98	761	32	0

15273102 LITTLE RABBIT CREEK AT ANCHORAGE

LOCATION.--Lat 61°04'37", long 149°48'47", in NE¼NE¼ sec.4, T.11 N., R.3 W., Municipality of Anchorage, Hydrologic Unit 19050002, on left bank 250 ft (76 m) downstream from Old Seward Highway, 0.2 mi (0.3 km) upstream from mouth, and 10 mi (16 km) south of Anchorage Post Office.

DRAINAGE AREA.--5.7 mi^2 (15 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OR RECORD.--May to September 1979.

GAGE.--Water-stage recorder. Altitude of gage is 36 ft (11 m), from topographic map. Prior to Aug. 14, 1979 at site 150 ft (46 m) upstream at different datum.

REMARKS.--Records poor.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period May to September, 62 ft^3/s (1.76 m^3/s), June 26, gage height, 1.00 ft (0.305 m), site and datum then in use; minimum daily, 2.7 ft^3/s (0.08 m^3/s), Sept. 11.

DISCHARGE. IN CUBIC FEET PER SECOND. MAY TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								20	21	17	9.0	3.5
2								21	22	17	9.0	3.5
3								23	20	17	8.0	3.5
4								28	18	18	7.5	3.5
5								27	17	19	7.0	3.0
6								25	16	20	7.0	3.0
7								27	14	18	6.5	3.0
8								26	13	17	6.5	3.0
9								20	12	15	6.2	3.0
10								16	12	14	6.0	3.0
11								14	13	14	6.0	2.7
12								15	12	16	6.0	3.0
13								17	11	17	5.5	3.0
14								16	10	17	5.5	3.0
15								15	10	22	6.0	3.0
16								13	11	23	6.0	3.0
17								13	13	23	6.0	3.0
18								12	13	20	5.0	3.0
19								14	11	19	5.0	3.5
20								13	12	18	5.0	6.1
21								14	12	17	5.0	8.0
22								15	11	16	4.5	7.2
23								16	11	16	4.5	6.4
24								16	12	15	4.0	7.0
25								15	14	15	4.0	6.4
26								15	28	14	4.0	5.4
27								18	31	12	4.5	6.0
28								20	24	11	4.0	7.0
29								19	20	11	4.0	6.0
30								19	19	10	4.5	5.5
31								20	---	9.5	4.0	---
TOTAL	---	---	---	---	---	---	---	562	462	507.5	175.7	130.2
MEAN	---	---	---	---	---	---	---	18.1	15.4	16.4	5.67	4.34
MAX	---	---	---	---	---	---	---	28	31	23	9.0	8.0
MIN	---	---	---	---	---	---	---	12	10	9.5	4.0	2.7
CFSM	---	---	---	---	---	---	---	3.18	2.70	2.88	1.00	.76
IN.	---	---	---	---	---	---	---	3.67	3.01	3.31	1.15	.85
AC-FT	---	---	---	---	---	---	---	1110	916	1010	349	258

15273102 LITTLE RABBIT CREEK AT ANCHORAGE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1979.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM WIDTH (FT)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
JUN												
26...	1500	--	16	95	--	--	7.0	--	--	--	--	--
27...	1400	--	31	93	--	--	7.0	--	--	--	--	--
AUG												
09...	0930	--	6.2	130	7.2	14.5	9.0	--	--	--	55	0
SEP												
11...	1430	7.0	2.7	140	6.8	19.0	8.0	11.9	100	760	66	0
11...	1431	--	--	140	6.8	--	--	11.8	99	--	--	--
11...	1432	--	--	140	6.8	--	--	11.9	100	--	--	--
11...	1433	--	--	135	6.8	--	--	11.9	100	--	--	--

15273900 SOUTH FORK CAMPBELL CREEK AT CANYON MOUTH NEAR ANCHORAGE

LOCATION.--Lat 61°08'52", long 149°43'12", in NE¼ sec. 12, T.12 N., R.3 W., Municipality of Anchorage, Hydrologic Unit 19050002, on right bank 1.9 mi (3.1 km) upstream from ford on Campbell Airstrip road crossing and 7.5 mi (12.1 km) southeast of Anchorage Post Office.

DRAINAGE AREA.--25.2 mi^2 (65.3 km^2).

PERIOD OF RECORD.--October 1966 to September 1979 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 520 ft (158 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, Nov. 6 to Apr. 26, which are fair. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--13 years, 40.7 ft^3/s (1.153 m^3/s), 21.94 in/yr (57 mm/yr), 29,490 acre-ft/yr (36.4 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 342 ft^3/s (9.69 m^3/s) Sept. 21, 1976, gage height, 3.89 ft (1.186 m), maximum gage height, 8.0 ft (2.44 m) winter 1970-71, backwater from ice; minimum discharge, 5.5 ft^3/s (0.16 m^3/s) May 7 and 8, 1978, gage height, 1.84 ft (0.561 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 160 ft^3/s (4.5 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
June 25	2300	*286	8.10	3.76	1.137	Sept.21	0430	202	5.95	3.45	1.052
July 5	1930	185	5.24	3.38	1.030						

Minimum daily discharge, about 10 ft^3/s (0.28 m^3/s) Mar. 23 to Apr. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	29	22	17	14	12	10	32	139	135	83	46
2	35	29	22	17	14	12	10	39	145	136	83	45
3	32	28	22	17	13	11	10	42	115	154	77	44
4	32	28	22	16	13	11	10	43	104	163	74	43
5	33	27	20	16	1[illegible]	11	10	43	102	171	73	42
6	35	26	20	16	13	11	10	42	102	167	74	41
7	35	26	20	16	13	11	10	41	104	150	77	42
8	43	26	20	16	13	11	10	41	101	137	78	41
9	44	26	20	16	13	11	10	40	101	127	70	41
10	39	26	20	16	13	11	10	39	114	122	69	40
11	39	26	20	16	13	11	10	39	123	120	69	39
12	37	26	20	16	13	11	10	43	125	136	64	39
13	36	26	20	16	13	11	10	46	121	132	63	40
14	35	24	20	15	13	11	10	46	113	126	68	39
15	33	24	20	15	12	11	10	44	113	151	81	38
16	34	24	19	15	12	11	10	41	124	144	78	35
17	36	24	19	15	12	11	10	39	121	133	83	42
18	37	24	19	15	12	11	10	40	114	126	69	47
19	34	24	19	15	12	11	10	45	114	128	63	66
20	34	24	19	15	12	11	10	47	123	119	60	136
21	33	24	19	15	12	11	11	47	118	119	57	181
22	31	24	18	15	12	11	11	47	112	113	54	122
23	35	24	18	14	12	10	12	50	117	110	52	111
24	37	22	18	14	12	10	13	55	129	119	52	112
25	34	22	18	14	12	10	14	59	198	116	51	98
26	32	22	18	14	12	10	14	71	234	110	49	83
27	30	22	18	14	12	10	15	85	202	100	49	91
28	30	22	18	14	12	10	18	101	170	92	47	95
29	28	22	17	14	---	10	22	121	149	90	53	75
30	32	22	17	14	---	10	26	119	135	86	53	78
31	32	---	17	14	---	10	---	113	---	86	48	---
TOTAL	1070	743	599	472	352	334	356	1700	3881	3918	2021	1992
MEAN	34.5	24.8	19.3	15.2	12.6	10.8	11.9	54.8	129	126	65.2	66.4
MAX	44	29	22	17	14	12	26	121	234	171	83	181
MIN	28	22	17	14	12	10	10	32	101	86	47	35
CFSM	1.37	.98	.77	.60	.50	.43	.47	2.18	5.12	5.00	2.59	2.64
IN.	1.58	1.10	.88	.70	.52	.49	.53	2.51	5.73	5.78	2.98	2.94
AC-FT	2120	1470	1190	936	698	662	706	3370	7700	7770	4010	3950

CAL YR 1978 TOTAL 12378.5 MEAN 33.9 MAX 137 MIN 5.7 CFSM 1.35 IN 18.27 AC-FT 24550
WTR YR 1979 TOTAL 17438.0 MEAN 47.8 MAX 234 MIN 10 CFSM 1.90 IN 25.74 AC-FT 34590

15274300 NORTH FORK CAMPBELL CREEK NEAR ANCHORAGE

LOCATION.--Lat 61°10'10", long 149°45'43", in SW¼ sec.35, T.13 N., R.3 W., Municipality of Anchorage, Hydrologic Unit 19050002, on right bank 40 ft (12 m) upstream from Campbell Airstrip road, 2.5 mi (4.0 km) upstream from confluence with South Fork, and 5.5 mi (8.8 km) southeast of Anchorage Post Office.

DRAINAGE AREA.--13.4 mi^2 (34.7 km^2).

PERIOD OF RECORD.--Annual maximum, water years 1967-74. June 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 300 ft (91 m), from topographic map. May 7, 1967 to June 5, 1974, crest-stage gage at site 25 ft (7.6 m) downstream at same datum.

REMARKS.--Records good except those for Nov. 8 to Apr. 13, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--5 years, 15.7 ft^3/s (0.445 m^3/s), 15.91 in/yr (404 mm/yr), 11,370 acre-ft/yr (14.0 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 107 ft^3/s (3.03 m^3/s) Aug. 9, 1971, gage height, 12.18 ft (3.712 m); minimum daily, about 1.0 ft^3/s (0.03 m^3/s) Dec. 8, 9, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 70 ft^3/s (1.98 m^3/s) June 26, gage height, 11.75 ft (3.581 m); minimum daily, about 2.0 ft^3/s (0.06 m^3/s) Feb. 25 to Mar. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	13	10	9.0	8.0	2.0	4.0	12	18	44	43	24
2	15	14	10	9.0	8.0	2.0	4.0	12	23	47	42	22
3	14	14	10	9.0	8.0	2.0	4.0	11	31	54	42	22
4	14	13	10	9.0	8.0	2.0	4.0	11	32	59	39	22
5	15	12	10	9.0	8.0	2.0	4.0	11	35	63	39	21
6	14	11	10	9.0	7.0	2.0	5.0	11	37	63	39	21
7	14	11	10	9.0	7.0	2.0	5.0	11	36	57	39	20
8	15	11	10	9.0	7.0	2.0	5.0	12	35	51	38	19
9	17	11	10	9.0	6.0	2.0	6.0	11	34	50	36	19
10	16	11	10	9.0	6.0	2.0	6.0	11	36	50	35	20
11	15	11	10	9.0	6.0	3.0	6.0	11	41	49	34	19
12	15	11	10	9.0	5.0	3.0	7.0	11	43	54	34	19
13	15	11	10	9.0	5.0	3.0	8.0	12	41	52	33	19
14	14	11	10	9.0	5.0	3.0	8.4	12	38	51	32	19
15	14	11	10	9.0	4.0	3.0	9.3	12	38	60	35	20
16	13	11	10	9.0	4.0	4.0	9.3	12	40	59	32	18
17	12	11	10	9.0	4.0	6.0	9.9	12	40	58	32	18
18	12	11	10	9.0	4.0	8.0	10	11	39	57	31	20
19	12	11	10	9.0	3.0	9.0	11	10	39	60	30	24
20	13	11	10	9.0	3.0	10	14	9.9	40	58	29	32
21	13	11	10	8.0	3.0	10	14	10	42	59	27	52
22	13	11	10	8.0	3.0	9.0	15	10	41	58	26	44
23	14	11	10	8.0	3.0	8.0	16	11	40	57	26	35
24	15	11	10	8.0	3.0	8.0	12	11	44	57	25	33
25	14	11	10	8.0	2.0	7.0	12	10	54	53	25	31
26	13	11	10	8.0	2.0	6.0	12	11	67	52	26	28
27	13	11	10	8.0	2.0	5.0	11	11	63	49	25	27
28	14	11	10	8.0	2.0	5.0	11	13	53	46	24	30
29	14	11	10	8.0	---	5.0	11	15	45	44	26	25
30	14	11	10	8.0	---	4.0	11	16	43	43	26	24
31	15	---	10	8.0	---	4.0	---	16	---	43	25	---
TOTAL	435	341	310	268.0	136.0	143.0	264.9	359.9	1208	1657	995	747
MEAN	14.0	11.4	10.0	8.65	4.86	4.61	8.83	11.6	40.3	53.5	32.1	24.9
MAX	17	14	10	9.0	8.0	10	16	16	67	63	43	52
MIN	12	11	10	8.0	2.0	2.0	4.0	9.9	18	43	24	18
CFSM	1.05	.85	.75	.65	.36	.34	.66	.87	3.01	3.99	2.40	1.86
IN.	1.21	.95	.86	.74	.38	.40	.74	1.00	3.35	4.60	2.76	2.07
AC-FT	863	676	615	532	270	284	525	714	2400	3290	1970	1480

CAL YR 1978 TOTAL 4571.1 MEAN 12.5 MAX 44 MIN 3.5 CFSM .93 IN 12.69 AC-FT 9070
WTR YR 1979 TOTAL 6864.8 MEAN 18.8 MAX 67 MIN 2.0 CFSM 1.40 IN 19.06 AC-FT 13620

NOTE.--No gage-height record Feb. 9 to Mar. 22.

15274600 CAMPBELL CREEK NEAR SPENARD

LOCATION.--Lat 61°08'17", long 149°55'20", on line between sec.11 and 14, T.12 N., R.4 W., Municipality of Anchorage, Hydrologic Unit 19050002, on upstream right wingwall of bridge at Dimond Boulevard crossing, 2.0 mi (3.2 km) upstream from mouth, and 4.3 mi (6.9 km) south of Spenard.

DRAINAGE AREA.--69.7 mi² (180.5 km²).

PERIOD OF RECORD.--June 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 18.04 ft (5.499 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for the period of no gage-height record, Nov. 4 to Apr. 16, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--13 years, 60.2 ft³/s (1.705 m³/s), 11.73 in/yr (298 mm/yr), 43,610 acre-ft/yr (53.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 421 ft³/s (11.9 m³/s) Aug. 9, 1971, gage height, 3.63 ft (1.106 m); maximum gage height recorded, 5.29 ft (1.612 m) Apr. 20, 1976, backwater from ice; minimum daily discharge, 2.2 ft³/s (0.062 m³/s) Feb. 5, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 375 ft³/s (10.6 m³/s) June 26, gage height, 2.83 ft (0.863 m); minimum daily discharge, about 3.0 ft³/s (0.08 m³/s) Feb. 25 to Mar. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	48	20	14	11	3.0	14	74	146	175	135	68
2	59	46	20	14	11	3.0	16	79	174	173	132	66
3	50	44	20	14	11	3.0	18	77	162	192	129	64
4	53	42	20	14	11	3.0	20	78	143	211	125	63
5	50	42	20	14	10	3.0	25	75	141	233	119	60
6	52	40	20	14	10	3.0	30	75	142	237	113	58
7	52	40	20	14	10	3.0	35	72	141	207	108	57
8	64	40	18	14	9.0	3.0	40	71	138	185	112	55
9	78	36	18	14	9.0	3.0	50	68	131	172	112	55
10	67	36	18	13	9.0	3.0	60	67	147	165	109	54
11	63	36	18	13	8.0	3.5	70	64	161	160	109	53
12	61	32	18	13	8.0	3.5	70	68	147	180	106	53
13	58	32	18	13	7.0	3.5	76	71	166	190	99	54
14	55	32	18	13	7.0	3.5	80	74	157	177	105	54
15	50	32	18	13	6.0	3.5	80	70	151	192	117	55
16	49	28	16	13	6.0	3.5	80	66	162	178	110	53
17	51	28	16	13	5.0	4.0	80	59	167	225	119	57
18	56	28	16	13	5.0	4.0	77	58	160	215	108	66
19	51	28	16	13	4.0	4.0	76	59	155	202	99	96
20	57	28	16	13	4.0	6.0	74	63	169	193	93	134
21	55	28	16	13	4.0	12	71	61	172	193	89	240
22	50	24	16	13	4.0	12	68	62	161	187	85	189
23	47	24	16	13	4.0	10	65	61	161	184	80	159
24	53	24	16	13	4.0	10	68	67	170	187	79	157
25	53	24	16	13	3.0	10	71	67	208	176	76	142
26	53	24	14	12	3.0	9.0	68	76	351	189	75	125
27	50	24	14	12	3.0	9.0	68	87	343	191	72	138
28	43	24	14	12	3.0	9.0	66	106	280	185	71	162
29	46	20	14	12	---	9.0	67	131	207	167	72	125
30	48	20	14	12	---	10	69	138	182	151	81	115
31	47	---	14	12	---	12	---	133	---	141	73	---
TOTAL	1671	954	528	406	189.0	181.0	1752	2377	5295	5813	3112	2825
MEAN	53.9	31.8	17.0	13.1	6.75	5.84	58.4	76.7	177	188	100	94.2
MAX	78	48	20	14	11	12	80	138	351	237	135	240
MIN	43	20	14	12	3.0	3.0	14	58	131	141	71	53
CFSM	.77	.46	.24	.19	.10	.08	.84	1.10	2.54	2.70	1.44	1.35
IN.	.89	.51	.28	.22	.10	.10	.94	1.27	2.83	3.10	1.66	1.51
AC-FT	3310	1890	1050	805	375	359	3480	4710	10500	11530	6170	5600

CAL YR 1978 TOTAL 18934.0 MEAN 51.9 MAX 200 MIN 14 CFSM .75 IN 10.11 AC-FT 37560
WTR YR 1979 TOTAL 25103.0 MEAN 68.8 MAX 351 MIN 3.0 CFSM .99 IN 13.40 AC-FT 49790

15275100 CHESTER CREEK AT ARCTIC BOULEVARD AT ANCHORAGE

LOCATION.--Lat 61°12'19", long 149°53'43", on line between sec.19, R.3 W., and sec.24, R.4 W., T.13 N., Municipality of Anchorage, Hydrologic Unit 19050002, on upstream right bank wingwall of bridge on Arctic Boulevard at Anchorage.

DRAINAGE AREA.--27.2 mi^2 (70.4 km^2).

PERIOD OF RECORD.--June 1966 to current year.

REVISED RECORDS.--WRD Alaska 1972: Drainage area.

GAGE.--Water-stage recorder and culvert control. Datum of gage is 16.02 ft (4.883 m) National Geodetic Vertical Datum of 1929 (from USC&GS, datum of 1968).

REMARKS.--Records fair except those for the period of no gage-height record, Nov. 8 to Mar. 30, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--13 years, 16.7 ft^3/s (0.473 m^3/s), 8.34 in/yr (212 mm/yr), 12,100 acre-ft/yr (14.9 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 180 ft^3/s (5.10 m^3/s) June 27, 1979, gage height, 4.83 ft (1.472 m); minimum daily, about 1.6 ft^3/s (0.045 m^3/s) Feb. 12-14, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 180 ft^3/s (5.10 m^3/s) June 27, gage height, 4.83 ft (1.472 m); minimum daily, 6 ft^3/s (0.17 m^3/s) Feb. 26 to Mar. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	15	13	10	8.0	6.0	18	27	23	21	29	20
2	18	13	15	10	8.0	6.0	17	27	23	20	28	20
3	13	14	15	10	8.0	6.0	22	26	22	20	28	20
4	13	13	14	10	8.0	6.0	29	25	22	30	27	20
5	13	12	14	10	8.0	6.0	33	24	22	33	26	20
6	12	13	14	10	8.0	6.0	24	24	22	26	28	20
7	13	13	14	10	8.0	6.0	27	24	22	23	29	20
8	17	12	14	10	8.0	6.0	42	24	22	24	28	20
9	18	12	14	10	8.0	6.0	42	23	21	21	27	20
10	14	12	14	10	8.0	6.0	54	23	21	20	27	19
11	12	12	13	10	7.0	7.0	43	22	21	20	28	19
12	12	12	13	10	7.0	7.0	39	23	21	46	27	19
13	12	12	13	10	7.0	8.0	37	23	21	32	26	21
14	12	12	13	10	7.0	8.0	34	22	21	40	31	24
15	12	12	13	10	7.0	10	31	22	21	60	28	22
16	12	12	12	9.0	7.0	15	32	22	23	44	27	20
17	14	12	12	9.0	7.0	20	32	22	21	34	26	24
18	13	12	12	9.0	7.0	25	29	23	21	38	23	22
19	13	12	12	9.0	7.0	35	32	24	21	36	23	23
20	17	12	12	9.0	7.0	45	31	23	32	31	22	40
21	18	13	12	9.0	7.0	45	31	23	24	37	22	42
22	17	13	12	9.0	7.0	45	32	23	21	34	22	25
23	16	13	11	9.0	7.0	35	32	23	20	30	22	28
24	16	13	11	9.0	7.0	30	35	23	20	51	22	23
25	18	13	11	9.0	7.0	25	36	23	32	43	22	22
26	17	13	11	9.0	6.0	25	37	23	51	36	21	21
27	17	13	11	9.0	6.0	20	31	23	57	33	20	40
28	15	13	11	9.0	6.0	18	30	23	42	31	20	41
29	16	13	11	9.0	---	16	30	23	28	30	28	25
30	18	13	11	9.0	---	16	28	24	23	29	23	23
31	16	---	11	9.0	---	16	---	23	---	29	22	---
TOTAL	459	379	389	294.0	203.0	531.0	970	727	761	1002	782	723
MEAN	14.8	12.6	12.5	9.48	7.25	17.1	32.3	23.5	25.4	32.3	25.2	24.1
MAX	18	15	15	10	8.0	45	54	27	57	60	31	42
MIN	12	12	11	9.0	6.0	6.0	17	22	20	20	20	19
CFSM	.54	.46	.46	.35	.27	.63	1.19	.86	.93	1.19	.93	.89
IN.	.63	.52	.53	.40	.28	.73	1.33	.99	1.04	1.37	1.07	.99
AC-FT	910	752	772	583	403	1050	1920	1440	1510	1990	1550	1430

CAL YR 1978 TOTAL 5883.0 MEAN 16.1 MAX 54 MIN 11 CFSM .59 IN 8.05 AC-FT 11670
WTR YR 1979 TOTAL 7220.0 MEAN 19.8 MAX 60 MIN 6.0 CFSM .73 IN 9.87 AC-FT 14320

15276000 SHIP CREEK NEAR ANCHORAGE

LOCATION.--Lat 61°13'25", long 149°37'55", in NE¼ sec.16, T.13 N., R.2 W., Municipality of Anchorage, Hydrologic Unit 19050002, in Fort Richardson Military Reservation, at diversion dam and Fort Richardson water-supply intake building, 3.5 mi (5.6 km) upstream from North Fork Ship Creek, and 8.5 mi (13.7 km) east of Anchorage.
DRAINAGE AREA.--90.5 mi^2 (234.4 km^2).
PERIOD OF RECORD.--October 1946 to current year.
REVISED RECORDS.--WSP 1936: Drainage area.
GAGE.--Water-stage recorder and masonry dam. Prior to May 10, 1976, spillway elevation was about 4 ft (1.2 m) lower. Datum of gage is 530 ft (161.5 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). See WSP 1936 for history of changes prior to Oct. 1, 1954.
REMARKS.--Records good except those for Nov. 9 to May 2, which are poor. Discharge data represent net flow remaining after diversion for water supply to Fort Richardson, Elmendorf Air Force Base, and Municipality of Anchorage. Average diversion for water year 1979, 17.9 ft^3/s (0.51 m^3/s). Diversion began in 1944. Several observations of water temperature were made during the year.
COOPERATION.--Gage inspected and records of diversion furnished by Office of Post Engineers, Fort Richardson.
AVERAGE DISCHARGE.--33 years, 159 ft^3/s (4.503 m^3/s), 23.86 in/yr (606 mm/yr), 115,200 acre-ft/yr (142 hm^3/yr), adjusted to include diversion.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,860 ft^3/s (52.7 m^3/s) June 21, 1949, gage height, 3.44 ft (1.049 m), site and datum then in use; no flow at times.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 810 ft^3/s (22.9 m^3/s) June 1, gage height, 7.01 ft (2.137 m); minimum daily, about 13 ft^3/s (0.37 m^3/s) Apr. 11-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	78	40	34	28	14	14	102	658	393	246	132
2	109	75	40	34	28	14	14	110	742	421	243	128
3	96	67	40	34	28	14	14	117	634	498	231	126
4	93	77	40	34	24	14	14	138	562	562	231	120
5	91	77	40	34	24	14	14	152	538	578	222	115
6	102	74	40	32	24	14	14	162	538	534	219	112
7	104	71	40	32	24	14	14	162	522	486	213	110
8	138	48	40	32	24	14	14	168	494	446	208	109
9	154	48	40	32	24	14	14	154	486	407	200	107
10	144	52	40	32	24	14	14	150	534	382	198	104
11	138	52	38	32	20	14	13	152	562	372	195	104
12	134	50	38	32	20	14	13	165	554	410	185	102
13	132	50	38	32	20	14	13	178	518	407	180	110
14	124	45	38	32	20	14	13	182	478	410	188	109
15	112	45	38	32	20	14	13	185	466	478	228	109
16	109	50	38	30	16	14	13	182	470	460	231	107
17	114	50	38	30	16	14	13	168	446	428	264	114
18	124	50	36	30	16	14	13	175	424	424	234	120
19	109	50	36	30	16	14	13	188	424	424	210	132
20	107	50	36	30	16	14	14	195	442	407	195	170
21	102	48	36	30	15	14	15	205	432	407	185	252
22	96	46	36	30	15	14	17	208	432	379	170	243
23	82	46	36	30	15	14	20	222	466	354	160	261
24	90	44	36	30	15	14	26	246	502	365	156	255
25	91	44	36	30	15	14	37	270	558	358	152	234
26	90	44	34	28	14	14	43	318	610	330	148	213
27	88	44	34	28	14	14	47	407	502	306	144	222
28	82	44	34	28	14	14	54	518	466	282	140	228
29	81	42	34	28	---	14	68	630	414	273	146	200
30	84	42	34	28	---	14	82	598	382	241	154	213
31	81	---	34	28	---	14	---	578	---	255	136	---
TOTAL	3302	1603	1158	958	549	434	680	7385	15256	12477	6012	4661
MEAN	107	53.4	37.4	30.9	19.6	14.0	22.7	238	509	402	194	155
MAX	154	78	40	34	28	14	82	630	742	578	264	261
MIN	81	42	34	28	14	14	13	102	382	241	136	102
AC-FT	6550	3180	2300	1900	1090	861	1350	14650	30260	24750	11920	9250

CAL YR 1978 TOTAL 40713 MEAN 112 MAX 702 MIN 16 AC-FT 80750
WTR YR 1979 TOTAL 54475 MEAN 149 MAX 742 MIN 13 AC-FT 108100

ADJUSTED TO INCLUDE DIVERSION

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	125	70.4	55.5	49.5	36.9	32.3	39.5	254	528	422	212	173
CFSM	1.38	0.78	0.61	0.55	0.41	0.36	0.44	2.81	5.83	4.66	2.34	1.91
IN	1.59	0.87	0.71	0.63	0.42	0.41	0.49	3.23	6.51	5.37	2.71	2.13
AC-FT	7,670	4,190	3,410	3,040	2,050	1,980	2,350	15,600	31,410	25,920	13,060	10,280

CAL YR 1978 MEAN 130 CFSM 1.44 IN 19.54 AC-FT 94,320
WTR YR 1979 MEAN 167 CFSM 1.85 IN 25.06 AC-FT 121,000

15276570 SHIP CREEK BELOW POWER PLANT AT ELMENDORF AIR FORCE BASE

LOCATION.--Lat 61°13'29", long 149°50'39", in SE¼ sec.8, T.13 N., R.3 W., Municipality of Anchorage, Hydrologic Unit 19050002, on left bank 500 ft (150 m) downstream from North Sitka Street, 0.5 mi (0.8 km) downstream from southwest corner of Elmendorf Air Force Base, and 2.0 mi (3.2 km) upstream from mouth.

DRAINAGE AREA.--115 mi^2 (298 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 80 ft (24 m), from topographic map. Prior to Aug. 7, 1972, at site 0.5 mi (0.8 km) upstream at different datum.

REMARKS.--Water-discharge records good. Diversions above station for water supply to Fort Richardson, Elmendorf Air Force Base, and Municipality of Anchorage (see station 15276000). Water also diverted for cooling of power plant and returned above station.

AVERAGE DISCHARGE.--9 years, 131 ft^3/s (3.710 m^3/s), 94,910 acre-ft/yr (117 hm^3/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,600 ft^3/s (45.3 m^3/s) Aug. 9, 1971 (estimated from records at station 15276500); minimum, 5.8 ft^3/s (0.16 m^3/s) Apr. 14, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 646 ft^3/s (18.3 m^3/s) June 1, gage height, 3.42 ft (1.042 m); minimum, 17 ft^3/s (0.48 m^3/s) Mar. 9, gage height, 0.77 ft (0.241 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	89	50	39	29	20	23	105	576	386	252	136
2	114	84	53	36	29	20	23	109	610	402	246	132
3	101	73	52	33	27	22	24	117	546	458	238	130
4	102	84	40	31	27	21	25	132	504	515	233	129
5	96	82	47	29	27	21	26	141	500	527	230	122
6	105	84	53	35	26	20	26	157	500	500	225	117
7	106	77	53	32	24	20	25	157	489	455	223	114
8	143	43	54	27	27	20	27	159	466	428	221	112
9	177	65	52	30	26	20	31	147	447	396	211	112
10	161	76	45	29	25	19	31	143	489	373	204	109
11	147	70	41	30	24	20	31	141	512	367	201	106
12	143	64	41	30	23	21	30	153	504	399	197	105
13	138	64	45	31	23	20	31	163	485	399	189	111
14	127	34	44	30	26	20	31	170	451	399	185	114
15	120	24	28	30	23	20	30	165	444	462	218	114
16	112	21	22	31	23	20	31	168	447	444	233	114
17	114	21	20	31	23	20	31	157	428	421	266	115
18	127	29	21	29	23	20	32	161	412	418	246	123
19	114	54	29	28	23	22	31	170	409	425	221	136
20	114	71	38	24	23	21	31	182	428	399	206	157
21	112	76	38	25	23	23	31	192	415	402	189	257
22	108	74	36	30	23	23	32	197	409	380	177	257
23	91	65	41	31	22	24	34	201	428	357	168	277
24	105	47	42	29	23	23	42	221	458	370	168	274
25	106	42	39	29	23	23	54	233	493	364	157	255
26	103	67	40	28	23	25	62	280	542	341	155	233
27	102	65	41	28	22	24	65	335	470	316	149	235
28	95	59	42	26	21	23	73	425	447	297	143	252
29	95	52	42	26	---	23	84	534	412	283	145	221
30	98	51	41	28	---	23	96	542	383	271	161	218
31	92	---	42	28	---	23	---	538	---	266	147	---
TOTAL	3574	1807	1272	923	681	664	1143	6695	14104	12220	6204	4885
MEAN	115	60.2	41.0	29.8	24.3	21.4	38.1	216	470	394	200	163
MAX	177	89	54	39	29	25	96	542	610	527	266	277
MIN	91	21	20	24	21	19	23	105	383	266	143	105
AC-FT	7090	3580	2520	1830	1350	1320	2270	13280	27980	24240	12310	9690

CAL YR 1978 TOTAL 40933 MEAN 112 MAX 477 MIN 20 AC-FT 81190
WTR YR 1979 TOTAL 54172 MEAN 148 MAX 610 MIN 19 AC-FT 107500

15276570 SHIP CREEK BELOW POWER PLANT AT ELMENDORF AIR FORCE BASE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: May 1971 to current year.

INSTRUMENTATION.--Temperature recorder since Oct. 19, 1970.

REMARKS.--Water temperatures at low flow are significantly increased by power plant effluent located 0.9 mi (1.4 km) upstream. Prior to August 1972, sampling site was 0.5 mi (0.8 km) upstream. Temperature at the sensor was compared with the average for the river by temperature cross-sections Aug. 13 and Sept. 19. A maximum variation of 0.2°C was found within the cross-sectios.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 18.0°C Aug. 15, 16, 1974; minimum, 0.0°C Jan. 13, 14, 1974 and Feb. 3, 1978.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 15.0°C Aug. 23, 24, 27, 28; minimum, 1.5°C Nov. 9, Feb. 8, 14, 15, and Mar. 1.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SAMP-LING DEPTH (FT)	DEPTH AT SAMPLE LOC-ATION, TOTAL (FEET)	PER-CENT OF TOTAL DEPTH	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)
AUG								
13...	1330	51	--	--	--	--	196	--
13...	1331	--	5.0	.4	2.20	20	--	11.5
13...	1332	--	5.0	1.3	2.20	60	--	11.5
13...	1333	--	5.0	1.8	2.20	80	--	11.4
13...	1334	--	12	.5	2.50	20	--	11.5
13...	1335	--	12	1.5	2.50	60	--	11.5
13...	1336	--	12	2.0	2.50	80	--	11.5
13...	1337	--	19	.5	2.40	20	--	11.4
13...	1338	--	19	1.4	2.40	60	--	11.5
13...	1339	--	19	1.9	2.40	80	--	11.5
13...	1340	--	25	.4	2.00	20	--	11.5
13...	1341	--	25	1.2	2.00	60	--	11.5
13...	1342	--	25	1.6	2.00	80	--	11.4
13...	1343	--	35	.3	1.30	20	--	11.5
13...	1344	--	35	1.0	1.30	80	--	11.5
13...	1345	--	45	.3	1.50	20	--	11.5
13...	1346	--	45	.9	1.50	60	--	11.5
13...	1347	--	45	1.2	1.50	80	--	11.5
13...	1348	--	50	--	--	--	--	11.6
SEP								
19...	1610	50	--	--	--	--	136	--
19...	1611	--	5.0	.4	1.80	20	--	11.6
19...	1612	--	5.0	1.1	1.80	60	--	11.6
19...	1613	--	5.0	1.4	1.80	80	--	11.7
19...	1614	--	10	.4	2.20	20	--	11.6
19...	1615	--	10	1.3	2.20	60	--	11.6
19...	1616	--	10	1.8	2.20	80	--	11.6
19...	1617	--	15	.4	2.20	20	--	11.6
19...	1618	--	15	1.3	2.20	60	--	11.6
19...	1619	--	15	1.8	2.20	80	--	11.6
19...	1620	--	20	.4	2.00	20	--	11.6
19...	1621	--	20	1.2	2.00	60	--	11.7
19...	1622	--	20	1.6	2.00	80	--	11.7
19...	1623	--	25	.4	2.00	20	--	11.5
19...	1624	--	25	1.2	2.00	60	--	11.6
19...	1625	--	25	1.6	2.00	80	--	11.6
19...	1626	--	30	.4	2.00	20	--	11.7
19...	1627	--	30	1.2	2.00	60	--	11.7
19...	1628	--	30	1.6	2.00	80	--	11.7
19...	1630	--	35	.6	1.00	60	--	11.7
19...	1632	--	40	.3	1.30	20	--	11.8
19...	1634	--	40	1.0	1.30	80	--	11.7
19...	1635	--	45	.3	1.30	20	--	11.7
19...	1637	--	45	1.0	1.30	80	--	11.6
19...	1638	--	49	--	--	--	--	11.7
19...	1639	--	1.0	--	--	--	--	11.7

15276570 SHIP CREEK BELOW POWER PLANT AT ELMENDORF AIR FORCE BASE--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.0	6.0	4.5	3.0	6.0	5.0	5.0	3.0	8.0	6.5	5.0	1.5
2	9.0	7.5	4.5	3.5	6.0	4.0	4.5	3.0	7.5	4.0	5.5	2.5
3	8.0	6.0	4.5	2.0	5.0	4.0	4.5	3.0	4.0	2.5	6.5	4.5
4	7.5	5.5	4.0	3.0	7.0	3.0	5.0	3.0	4.0	3.0	5.5	4.0
5	8.5	6.5	4.0	3.0	7.0	5.0	6.5	4.5	4.5	2.0	8.5	5.5
6	8.5	7.5	4.5	3.5	6.0	5.0	6.0	4.0	4.0	2.5	9.5	7.0
7	8.5	7.5	5.0	3.5	6.5	5.0	4.0	3.0	4.5	2.0	9.0	6.5
8	8.0	7.5	5.5	2.5	6.5	5.0	6.0	3.5	2.5	1.5	10.0	7.5
9	7.5	7.0	5.5	1.5	6.0	5.0	5.0	4.0	3.5	2.5	10.0	6.5
10	8.0	6.0	4.0	2.5	5.5	4.0	6.0	3.5	3.5	2.5	9.5	6.5
11	7.5	7.0	4.5	3.5	5.5	4.0	6.0	4.5	3.5	2.5	9.0	6.0
12	7.5	6.0	4.5	3.5	5.5	4.0	6.5	3.5	3.5	2.5	10.0	6.0
13	7.5	6.0	4.5	4.0	5.0	4.0	6.5	5.0	3.5	2.0	10.5	7.0
14	6.5	5.5	5.5	3.0	5.5	3.5	5.5	4.5	3.0	1.5	10.0	6.0
15	6.0	4.0	5.0	2.5	4.0	2.5	7.0	5.0	4.0	1.5	10.5	7.0
16	6.5	4.5	5.0	3.0	3.0	2.0	7.0	5.5	4.0	2.5	10.5	7.0
17	7.5	5.5	4.5	2.5	4.0	2.5	6.0	4.0	4.0	3.0	9.0	7.0
18	7.5	6.0	5.0	3.5	5.5	3.5	6.5	4.0	3.5	2.0	9.0	6.0
19	7.5	6.5	4.0	3.5	5.0	3.5	6.5	3.5	4.5	2.5	10.0	7.0
20	7.0	5.5	4.5	3.0	4.5	3.5	5.0	3.5	4.0	2.5	10.5	7.0
21	5.5	4.0	4.5	3.0	4.0	3.0	6.5	4.5	6.0	2.5	9.5	7.5
22	4.5	3.5	5.0	4.0	4.0	2.5	7.0	5.0	6.5	3.0	10.0	7.5
23	5.0	2.5	4.5	3.0	4.5	3.0	7.0	5.0	6.0	2.5	10.0	7.5
24	5.0	3.0	4.5	3.5	4.0	2.5	7.0	4.0	5.0	2.5	9.5	7.0
25	6.0	4.0	4.5	4.0	3.0	2.0	6.5	4.5	4.5	3.0	9.5	6.5
26	6.5	4.5	4.5	3.0	4.0	3.0	6.5	5.0	6.0	3.0	10.5	6.5
27	6.5	5.0	5.5	4.0	4.5	3.0	6.0	4.0	5.0	2.5	11.5	7.5
28	5.5	4.0	5.0	4.5	4.5	2.5	6.0	4.5	6.0	2.5	11.0	5.5
29	6.0	4.0	6.0	3.5	5.0	3.5	6.5	4.5	---	---	10.5	5.0
30	5.0	4.0	5.5	4.0	4.0	3.0	7.0	4.0	---	---	10.5	5.0
31	5.0	3.0	---	---	4.0	3.5	7.5	6.0	---	---	9.0	7.0
MONTH	9.0	2.5	6.0	1.5	7.0	2.0	7.5	3.0	8.0	1.5	11.5	1.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.0	6.5	11.5	6.5	10.0	6.5	11.0	8.5	12.5	10.0	12.0	9.0
2	11.0	7.0	9.5	6.0	8.5	6.5	12.0	8.5	13.5	10.0	12.0	9.0
3	10.5	8.0	10.0	6.0	8.0	6.0	12.0	9.0	13.5	10.0	11.0	9.5
4	10.5	8.0	8.5	6.0	9.5	6.0	11.5	9.0	13.0	10.0	12.5	9.0
5	11.5	8.0	8.5	5.5	9.5	7.0	10.0	8.5	12.0	10.5	12.5	9.5
6	10.0	7.5	8.0	5.5	9.5	7.5	9.0	8.0	12.0	10.0	12.5	9.0
7	10.5	7.5	8.0	6.0	9.0	7.5	10.0	7.5	11.5	10.0	12.5	9.5
8	11.0	7.0	8.0	5.5	8.5	7.0	9.5	8.0	12.0	10.0	12.5	9.0
9	12.0	7.5	9.5	5.0	10.5	7.0	10.5	8.0	10.5	9.5	12.0	9.0
10	12.0	7.5	9.0	5.5	10.0	7.5	11.5	8.5	10.5	10.0	13.0	10.0
11	11.5	6.5	10.0	6.0	9.5	7.5	11.0	9.0	10.5	10.0	12.5	9.0
12	12.0	6.0	9.5	6.0	10.0	6.5	10.0	9.0	12.5	10.0	11.5	10.5
13	12.0	5.5	10.0	5.5	10.0	7.5	10.5	8.5	11.5	10.0	11.0	10.5
14	11.0	5.5	9.0	6.5	10.5	7.5	10.5	9.0	11.0	10.5	11.5	10.5
15	11.0	6.0	9.5	6.0	10.5	8.5	9.5	8.5	11.0	10.0	11.0	10.0
16	12.0	7.0	8.0	6.5	9.5	8.5	10.0	8.0	11.5	10.5	11.0	9.5
17	12.0	7.5	10.0	5.5	9.0	8.0	11.5	8.0	11.5	10.0	11.0	10.0
18	11.0	7.5	10.5	6.5	10.0	8.5	11.5	9.0	12.0	10.0	11.0	9.5
19	12.5	8.0	9.5	6.5	10.0	9.0	11.5	9.0	13.0	10.5	11.5	9.5
20	11.0	8.5	10.5	6.0	9.0	8.5	12.0	9.0	13.5	11.0	11.0	9.5
21	10.5	8.0	10.0	6.0	9.5	8.5	12.0	10.0	14.0	10.5	9.5	8.5
22	11.0	7.5	9.0	6.0	10.5	9.0	11.0	9.0	14.0	11.0	9.0	8.0
23	12.0	7.0	9.5	7.0	11.0	9.5	10.5	9.0	15.0	11.0	9.0	8.0
24	12.5	8.0	9.5	6.5	11.5	10.0	10.0	9.0	15.0	12.0	9.0	8.0
25	10.5	6.5	11.0	6.5	10.0	9.0	10.0	9.0	14.5	11.5	8.0	7.0
26	11.5	6.0	11.5	6.0	9.0	8.5	11.5	8.5	14.5	11.5	8.0	7.0
27	11.5	7.0	11.5	6.0	9.5	8.0	12.0	9.0	15.0	12.0	8.0	7.5
28	12.0	6.5	11.0	6.0	9.5	8.5	12.0	9.0	15.0	12.0	8.5	7.0
29	10.5	7.0	9.0	6.0	9.5	7.0	12.0	10.0	12.5	10.5	7.5	6.0
30	12.5	7.0	9.5	6.0	10.0	7.5	12.5	10.0	12.0	9.0	8.0	6.0
31	---	---	9.5	5.5	---	---	12.0	9.5	12.0	9.0	---	---
MONTH	12.5	5.5	11.5	5.0	11.5	6.0	12.5	7.5	15.0	9.0	13.0	6.0
YEAR	15.0	1.5										

15277100 EAGLE RIVER AT EAGLE RIVER

LOCATION.--Lat 61°18'28", long 149°33'32", in NW¼ sec.13, T.14 N., R.2 W., Municipality of Anchorage, Hydrologic Unit 19050002, on right bank, 800 ft (200 m) upstream from Eagle River campground, 0.6 mi (1.0 km) upstream from Glenn Highway crossing, and 1.0 mi (1.6 km) south of Eagle River.

DRAINAGE AREA.--192 mi^2 (497 km^2), approximately.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 250 ft (76 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, Nov. 4 to Apr. 30, which are fair. Summer flows augmented by glaciers that cover 13 percent of the basin. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--14 years, 519 ft^3/s (14.70 m^3/s), 36.71 in/yr (932 mm/yr), 376,000 acre-ft/yr (464 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,240 ft^3/s (177 m^3/s) Sept. 18, 1967, gage height, 9.49 ft (2.893 m); minimum daily, 24 ft^3/s (0.68 m^3/s) Jan. 29 to Feb. 5, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,400 ft^3/s (68 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
July 15	0900	2,420	68.5	7.07	2.155	Aug. 10	0530	2,800	79.3	7.34	2.237
July 21	0530	2,490	70.5	7.12	2.170	Aug. 17	1200	*3,950	112	*8.08	2.463
July 25	0300	2,570	72.8	7.18	2.188	Sept.15	0200	2,610	73.9	7.21	2.198

Minimum daily discharge, about 60 ft^3/s (1.70 m^3/s) Feb. 6 to Mar. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	343	186	85	65	65	60	80	293	800	1050	1870	914
2	354	176	85	65	65	60	80	344	959	1170	2020	871
3	326	151	80	65	65	60	80	344	876	1500	2170	843
4	305	150	80	65	65	60	80	357	785	1870	2140	779
5	305	140	80	65	65	60	90	352	784	2070	2070	746
6	431	140	80	65	60	60	90	335	787	2060	2040	696
7	510	140	75	65	60	60	90	310	775	2090	2090	742
8	495	130	75	65	60	60	100	296	740	2070	2130	775
9	666	130	75	65	60	60	100	278	741	1900	2170	780
10	539	130	75	65	60	60	100	270	877	1850	2730	827
11	436	120	75	65	60	60	100	266	980	1940	2440	832
12	385	120	75	65	60	60	100	276	989	1990	2170	1010
13	352	120	70	65	60	60	100	284	951	2020	2050	1520
14	330	110	70	65	60	60	100	292	876	2120	2330	2120
15	305	110	70	65	60	60	100	298	860	2330	3010	2350
16	289	110	70	65	60	60	100	299	900	2220	3330	1740
17	281	110	70	65	60	60	100	286	869	2010	3710	1420
18	291	100	70	65	60	60	100	272	882	2200	2620	1230
19	279	100	70	65	60	60	100	273	1240	2170	2220	1300
20	271	100	70	65	60	60	100	283	1280	2210	2250	1680
21	265	95	70	65	60	70	110	294	1330	2320	1860	1660
22	254	95	70	65	60	80	110	299	1400	2150	1730	1300
23	220	95	65	65	60	100	120	303	1500	2110	1740	1310
24	262	90	65	65	60	100	140	325	1600	2350	1820	1190
25	247	90	65	65	60	90	150	341	1800	2460	1810	918
26	237	90	65	65	60	90	160	385	2000	2150	1730	751
27	229	90	65	65	60	90	180	454	1700	2040	1680	724
28	216	85	65	65	60	80	200	596	1200	1920	1520	708
29	212	85	65	65	---	80	220	779	1000	1960	1440	623
30	210	85	65	65	---	80	225	779	970	1930	1270	589
31	196	---	65	65	---	80	---	775	---	1810	1030	---
TOTAL	10041	3473	2225	2015	1705	2140	3505	11338	32451	62040	65190	32948
MEAN	324	116	71.8	65.0	60.9	69.0	117	366	1082	2001	2103	1098
MAX	666	186	85	65	65	100	225	779	2000	2460	3710	2350
MIN	196	85	65	65	60	60	80	266	740	1050	1030	589
CFSM	1.69	.60	.37	.34	.32	.36	.61	1.91	5.64	10.4	11.0	5.72
IN.	1.95	.67	.43	.39	.33	.41	.68	2.20	6.29	12.02	12.63	6.38
AC-FT	19920	6890	4410	4000	3380	4240	6950	22490	64370	123100	129300	65350

CAL YR 1978 TOTAL 180147 MEAN 494 MAX 3130 MIN 65 CFSM 2.57 IN 34.90 AC-FT 357300
WTR YR 1979 TOTAL 229071 MEAN 628 MAX 3710 MIN 60 CFSM 3.27 IN 44.38 AC-FT 454400

15277410 PETERS CREEK NEAR BIRCHWOOD

LOCATION.--Lat 61°25'08", long 149°29'20", in NW¼SE¼ sec.5, T.15 N., R.1 W., Municipality of Anchorage, Hydrologic Unit 19050002, on left bank 50 ft (15 m) upstream from Alaska Railroad bridge, 0.5 mi (0.8 km) downstream from unnamed tributary, 0.8 mi (1.3 km) upstream from mouth, and 1.0 mi (1.6 km) north of Birchwood.

DRAINAGE AREA.--87.8 mi^2 (227.4 km^2).

PERIOD OF RECORD.--August 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 75 ft (22.9 m), from topographic map.

REMARKS.--Records fair except those for Dec. 12 to Mar. 22, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--6 years, 108 ft^3/s (3.059 m^3/s), 16.70 in/yr (424 mm/yr), 78,250 acre-ft/yr (96.5 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 696 ft^3/s (19.7 m^3/s) Aug. 10, 1977, gage height, 6.13 ft (1.868 m); maximum gage height, 10.37 ft (3.161 m) Jan. 7, 1978, backwater from ice; minimum discharge, 10 ft^3/s (0.28 m^3/s) Feb. 16, 1977, gage height, 3.72 ft (1.134 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 595 ft^3/s (16.9 m^3/s) July 15, gage height, 6.29 ft (1.917 m); minimum discharge, about 23 ft^3/s (0.65 m^3/s) Mar. 9-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	75	54	32	28	26	28	72	228	294	467	186
2	111	72	54	31	28	26	28	76	225	322	467	177
3	107	66	54	31	27	26	28	81	234	328	440	168
4	105	74	56	31	27	25	26	85	228	408	412	158
5	103	75	62	30	27	25	26	86	237	440	380	155
6	105	72	55	30	27	24	24	92	246	420	372	150
7	105	70	55	30	27	24	24	92	249	420	364	145
8	111	55	51	30	27	24	26	97	240	440	350	142
9	120	63	49	30	27	23	26	93	246	460	328	140
10	118	70	44	30	27	23	26	92	276	500	339	140
11	111	69	38	30	27	23	24	92	300	520	328	142
12	107	63	36	29	27	23	26	92	286	521	311	155
13	105	63	35	29	27	23	24	99	283	526	297	189
14	103	48	35	29	27	23	24	99	276	508	318	216
15	101	45	34	29	27	24	26	99	266	545	388	204
16	99	43	34	29	27	24	24	99	266	485	449	171
17	99	42	34	29	27	25	24	99	255	480	467	168
18	99	41	34	29	27	26	24	97	252	498	380	160
19	95	40	34	29	27	27	26	97	266	462	336	158
20	92	40	33	29	27	28	27	97	283	462	318	186
21	92	40	33	28	27	28	27	97	294	508	290	198
22	92	39	33	28	27	28	27	101	294	512	269	180
23	81	39	33	28	27	28	29	105	328	472	269	174
24	86	39	33	28	27	28	34	107	360	485	266	168
25	85	40	33	28	27	28	37	111	384	472	269	152
26	85	50	33	28	26	28	42	118	346	440	269	140
27	83	58	33	28	26	28	46	135	311	472	252	138
28	80	68	33	28	26	26	53	189	311	449	249	130
29	81	60	32	28	---	25	56	225	304	436	243	120
30	80	54	32	28	---	26	63	228	300	440	231	122
31	75	---	32	28	---	28	---	225	---	490	201	---
TOTAL	3025	1673	1241	904	755	793	925	3477	8374	14215	10319	4832
MEAN	97.6	55.8	40.0	29.2	27.0	25.6	30.8	112	279	459	333	161
MAX	120	75	62	32	28	28	63	228	384	545	467	216
MIN	75	39	32	28	26	23	24	72	225	294	201	120
CFSM	1.11	.64	.46	.33	.31	.29	.35	1.28	3.18	5.23	3.79	1.83
IN.	1.28	.71	.53	.38	.32	.34	.39	1.47	3.55	6.02	4.37	2.05
AC-FT	6000	3320	2460	1790	1500	1570	1830	6900	16610	28200	20470	9580

CAL YR 1978 TOTAL 37523 MEAN 103 MAX 388 MIN 19 CFSM 1.17 IN 15.90 AC-FT 74430
WTR YR 1979 TOTAL 50533 MEAN 138 MAX 545 MIN 23 CFSM 1.57 IN 21.41 AC-FT 100200

NOTE.--No gage-height record Jan. 31 to Mar. 22.

15281000 KNIK RIVER NEAR PALMER

LOCATION.--Lat 61°30'18", long 149°01'50", in NE¼SE¼ sec.2, T.16 N., R.2 E., Matanuska-Susitna Borough, Hydrologic Unit 19050002, near right bank on downstream side of bridge on Old Glenn Highway, 7 mi (11 km) south of Palmer, 7 mi (11 km) upstream from Alaska Railroad bridge, 9 mi (14 km) downstream from Friday Creek, and about 17 mi (27 km) downstream from Knik Glacier.

DRAINAGE AREA.--1,180 mi² (3,060 km²), approximately.

PERIOD OF RECORD.--October 1959 to current year.

REVISED RECORDS.--WDR AK-77-1: 1974-75 (M).

GAGE.--Water-stage recorder. Datum of gage is 30.2 ft (9.20 m) National Geodetic Vertical Datum of 1929. Prior to June 27, 1960, nonrecording gage, and June 27, 1960 to Apr. 25, 1974, water-stage recorder at old bridge 100 ft (30 m) upstream at present datum. Apr. 26, 1974 to Apr. 18, 1976, nonrecording gage at site 0.4 mi (0.6 km) upstream at different datum.

REMARKS.--Records fair except those for period of no gage-height record, Nov. 17 to Apr. 12, which are poor. Flood peaks due to outbreak of Lake George, 1948-62, 1964, 1965, published in WSP 1936. Streamflow augmented by glaciers, which cover 54 percent of the basin.

AVERAGE DISCHARGE.--20 years, 6,887 ft³/s (195.0 m³/s), 79.27 in/yr (2,013 mm/yr), 4,990,000 acre-ft/yr (6.15 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 355,000 ft³/s (10,100 m³/s) July 26, 1961, gage height, 24.3 ft (7.41 m), caused by release of stored water (Lake George) behind Knik Glacier; maximum gage height, 24.35 ft (7.422 m) July 17, 1960; minimum daily discharge, about 260 ft³/s (7.4 m³/s) Mar. 1-31, 1962.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1948, 359,000 ft³/s (10,200 m³/s) July 18, 1958, stage, 25.30 ft (7.711 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 60,200 ft³/s (1,700 m³/s) Aug. 17, gage height, 13.39 ft (4.081 m); minimum daily, about 520 ft³/s (15 m³/s) Feb. 12 to Mar. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4780	1980	860	640	560	520	800	3950	12200	13800	22200	12500
2	4680	1900	880	620	560	520	800	4250	13200	15100	23400	11700
3	4420	1860	880	620	560	520	800	4620	12600	17300	25200	11200
4	4120	2080	880	600	540	520	820	4900	12200	20600	25700	10700
5	4450	1920	900	600	540	520	820	5080	12300	23300	25300	10600
6	5920	1680	900	600	540	520	840	4550	13000	24000	24900	10300
7	6760	1610	940	580	540	520	860	4280	12100	22500	24500	10300
8	7360	1420	980	580	540	520	900	4050	11900	21400	24100	10400
9	8500	1300	1000	580	540	520	880	4400	11900	20600	25200	10500
10	7960	1200	1000	580	540	520	880	4300	13100	20800	30100	11000
11	7210	1000	1000	580	540	520	840	4100	12800	21800	37300	10300
12	6370	920	960	580	520	520	800	3820	12500	21700	35400	10800
13	5710	860	940	580	520	520	792	5120	12300	21200	31300	11700
14	5180	820	900	580	520	540	804	5050	11700	21700	30700	13000
15	4780	760	880	580	520	540	780	5250	12100	22500	36700	14500
16	3700	740	840	580	520	540	792	5250	12900	20900	48300	19800
17	3820	720	780	560	520	560	840	4950	12200	19900	57200	11500
18	4620	720	740	560	520	560	853	5220	11800	21700	42800	10600
19	4350	700	700	560	520	560	840	5350	13300	22500	33900	11500
20	3900	700	680	560	520	580	892	5800	12800	23700	31600	11800
21	3680	680	680	560	520	640	944	5920	13000	25500	27400	11000
22	3370	680	680	560	520	740	931	6100	14400	24400	25700	11600
23	2970	680	680	560	520	880	970	6070	16500	25300	24600	12300
24	3090	680	680	560	520	980	1170	6610	18500	26200	24500	10500
25	3180	680	680	560	520	1000	1540	6790	19600	26600	24000	9140
26	2970	700	680	560	520	920	1790	7450	18200	26400	22900	9620
27	2860	740	680	560	520	840	2410	7780	17000	27100	22100	8580
28	2390	760	660	560	520	820	2350	8820	14300	26900	20900	7960
29	2350	800	660	560	---	820	2860	10500	13200	26500	19000	6820
30	2740	840	660	560	---	800	3250	11800	12800	25900	16400	7180
31	2120	---	640	560	---	800	---	12400	---	22900	14000	---
TOTAL	140310	32130	25020	17880	14840	19880	34848	184530	406400	700700	877300	329400
MEAN	4526	1071	807	577	530	641	1162	5953	13550	22600	28300	10980
MAX	8500	2080	1000	640	560	1000	3250	12400	19600	27100	57200	19800
MIN	2120	680	640	560	520	520	780	3820	11700	13800	14000	6820
CFSM	3.84	.91	.68	.49	.45	.54	.99	5.05	11.5	19.2	24.0	9.31
IN.	4.42	1.01	.79	.56	.47	.63	1.10	5.82	12.81	22.09	27.66	10.38
AC-FT	278300	63730	49630	35460	29440	39430	69120	366000	806100	1390000	1740000	653400

CAL YR 1978 TOTAL 2426030 MEAN 6647 MAX 30900 MIN 600 CFSM 5.63 IN 76.48 AC-FT 4812000
WTR YR 1979 TOTAL 2783238 MEAN 7625 MAX 57200 MIN 520 CFSM 6.46 IN 87.74 AC-FT 5521000

15290000 LITTLE SUSITNA RIVER NEAR PALMER

LOCATION.--Lat 61°42'32", long 149°13'36", in NW¼ sec.26, T.19 N., R.1 E., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on right bank 40 ft (12 m) downstream from highway bridge on Wasilla-Fishhook Road, 1.5 mi (2.4 km) north of road junction, 1.8 mi (2.9 km) downstream from unnamed tributary, and 8 mi (13 km) northwest of Palmer.

DRAINAGE AREA.--61.9 mi² (160.3 km²).

PERIOD OF RECORD.--July 1948 to current year. Low-flow records not equivalent prior to January 1962, because most measurements below 300 ft³/s (8 m³/s) were made at site 3.4 mi (5.6 km) downstream.

GAGE.--Water-stage recorder. Datum of gage is 918.6 ft (279.99 m) National Geodetic Vertical Datum of 1929 (river-profile survey). Prior to Aug. 16, 1948, nonrecording gage and Aug. 17, 1948 to May 15, 1972, water-stage recorder on left bank. Prior to Oct. 1, 1974, at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--31 years, 203 ft³/s (5.748 m³/s), 44.54 in/yr (1,131 mm/yr), 147,100 acre-ft/yr (181 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,840 ft³/s (222 m³/s) Aug. 10, 1971, gage height, 9.84 ft (2.999 m) in gage well, 12.30 ft (3.749 m), top of needle peak in gage well, about 13 ft (4.0 km) from floodmarks, present datum, from rating curve extended above 4,600 ft³/s (130 m³/s) on basis of slope-area measurement of peak flow; minimum daily, about 8 ft³/s (0.23 m³/s) Apr. 1-20, 1956 and Mar. 11, 12, 1957.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,200 ft³/s (34 m³/s) and maximum (*).

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 28	2100	2,060	58.3	7.05	2.15	June 25	1900	1,390	39.4	5.95	1.81
June 7	2300	1,550	43.9	6.24	1.90	July 5	2100	*2,130	60.3	*7.14	2.18

Minimum daily discharge, about 20 ft³/s (0.57 m³/s) Mar. 18-20 and Apr. 8-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	66	49	36	28	25	22	167	1490	585	504	126
2	105	62	46	34	28	25	22	176	1480	740	489	116
3	97	66	46	34	27	25	21	171	1290	894	432	112
4	91	81	45	34	27	25	21	185	1160	943	404	106
5	91	70	45	34	27	24	21	207	1210	1440	383	105
6	92	64	46	34	27	24	21	236	1270	1400	407	104
7	90	60	46	34	27	24	21	272	954	1210	371	104
8	90	59	45	34	27	24	20	294	922	927	368	103
9	88	58	44	32	27	23	20	260	1100	812	329	100
10	84	57	44	32	27	23	20	219	1330	706	298	100
11	100	56	44	32	26	23	20	238	1240	652	277	102
12	99	55	42	32	26	22	20	267	1040	656	267	102
13	96	54	42	32	26	22	21	311	836	681	250	102
14	90	54	40	32	26	21	21	347	754	660	238	102
15	85	53	40	30	26	21	21	401	793	975	226	97
16	84	53	40	30	26	21	21	446	778	778	212	92
17	88	53	40	30	26	21	21	493	698	664	210	137
18	97	52	38	30	26	20	21	547	673	817	203	352
19	87	52	38	30	26	20	21	550	656	715	198	332
20	84	54	38	30	26	20	22	622	694	627	194	627
21	82	56	38	30	26	27	22	711	723	660	183	627
22	80	58	38	28	26	28	23	754	817	606	183	442
23	73	56	38	28	25	26	25	715	913	532	190	398
24	83	52	38	28	25	25	34	769	865	536	196	377
25	76	52	38	28	25	24	39	970	991	664	196	314
26	75	51	36	28	25	24	49	1340	903	606	190	270
27	73	51	36	28	25	24	57	1590	677	540	180	246
28	71	50	36	28	25	23	81	1730	580	493	171	231
29	72	50	36	28	---	24	93	1610	504	464	176	207
30	71	50	36	28	---	24	113	1410	500	475	165	194
31	66	---	36	28	---	22	---	1370	---	529	142	---
TOTAL	2657	1705	1264	956	734	724	954	19378	27841	22987	8232	6427
MEAN	85.7	56.8	40.8	30.8	26.2	23.4	31.8	625	928	742	266	214
MAX	105	81	49	36	28	28	113	1730	1490	1440	504	627
MIN	66	50	36	28	25	20	20	167	500	464	142	92
CFSM	1.38	.92	.66	.50	.42	.38	.51	10.1	15.0	12.0	4.30	3.46
IN.	1.60	1.02	.76	.57	.44	.44	.57	11.65	16.73	13.81	4.95	3.86
AC-FT	5270	3380	2510	1900	1460	1440	1890	38440	55220	45590	16330	12750

CAL YR 1978 TOTAL 48325 MEAN 132 MAX 723 MIN 16 CFSM 2.13 IN 29.04 AC-FT 95850
WTR YR 1979 TOTAL 93859 MEAN 257 MAX 1730 MIN 20 CFSM 4.15 IN 56.41 AC-FT 186200

15291000 SUSITNA RIVER NEAR DENALI

LOCATION.--Lat 63°06'14", long 147°30'57", in NE¼ sec.10, T.21 S., R.1 E., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on upstream right pier of bridge on Denali Highway, 0.2 mi (0.3 km) downstream from Windy Creek, 3.3 mi (5.3 km) upstream from Butte Creek, and 5.3 mi (8.5 km) southwest of Denali.

DRAINAGE AREA.--950 mi^2 (2,460 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1957 to September 1966, July 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,440 ft (744 m), from topographic map. See WSP 2136 for history of changes prior to July 4, 1968. July 4, 1968 to Aug. 28, 1974, on left upstream wingwall, at present datum.

REMARKS.--Water-discharge records poor for period of no gage-height record prior to May 22, fair thereafter. Stream flow augmented by glaciers, which cover 25 percent of the basin.

AVERAGE DISCHARGE.--20 years (water years 1958-66, 1969-79), 2,723 ft^3/s (77.12 m^3/s), 38.93 in/yr (989 mm/yr), 1,973,000 acre-ft/yr (2.43 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,200 ft^3/s (1,080 m^3/s) Aug. 10, 1971, gage height, 13.32 ft (4.060 m) from rating curve extended above 19,000 ft^3/s (540 m^3/s); maximum gage height, 13.58 ft (4.139 m) May 11, 1970, backwater from ice; minimum daily discharge, about 34 ft^3/s (0.96 m^3/s) Mar. 16-31, 1959.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 14 or 15, 1967 reached a stage of 12.7 ft (3.87 m), from floodmarks, discharge, 28,200 ft^3/s (799 m^3/s), from rating curve extended above 19,000 ft^3/s (540 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,300 ft^3/s (377 m^3/s) July 6, gage height, 11.9 ft (3.63 m), from floodmarks, no peaks above base of 14,000 ft^3/s (400 m^3/s); minimum daily, about 200 ft^3/s (5.7 m^3/s) Mar. 6 to Apr. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1200	600	350	280	240	220	200	500	5900	7100	9900	4860
2	1100	600	350	280	240	220	200	500	6860	7640	9660	4580
3	1100	600	350	280	240	220	200	600	6800	8400	9740	4260
4	1100	600	350	280	240	220	200	600	6560	9000	9980	4140
5	1100	500	350	280	240	220	200	700	7580	11000	10200	3900
6	1000	500	350	280	240	200	200	700	7770	12500	10100	3900
7	1000	500	350	280	240	200	200	800	7340	11000	10500	4060
8	1000	500	350	280	240	200	200	800	7220	8820	11200	4260
9	1000	500	350	280	240	200	200	1000	7770	8190	10200	4500
10	1000	500	350	280	240	200	200	1000	8400	8400	9260	4580
11	900	500	300	260	240	200	220	1500	8400	8800	7910	4620
12	900	500	300	260	240	200	220	1500	8120	9260	7700	4740
13	900	500	300	260	220	200	220	2000	6920	9600	8610	5050
14	900	450	300	260	220	200	220	2000	6260	9600	9180	7100
15	900	450	300	260	220	200	220	2500	6080	9400	10100	8190
16	900	450	300	260	220	200	240	2500	6560	9200	10900	7220
17	800	450	300	260	220	200	240	3000	6500	9400	10500	6020
18	800	450	300	260	220	200	240	3000	6860	9600	9980	4780
19	800	450	300	260	220	200	240	3500	7840	9400	9100	4620
20	800	450	300	260	220	200	260	3500	8050	9400	9580	4860
21	800	400	300	260	220	200	260	4000	8680	9000	8890	4950
22	800	400	300	260	220	200	260	4000	8400	10500	8120	4700
23	700	400	300	260	220	200	260	4500	8330	10000	8470	4380
24	700	400	300	260	220	200	300	4460	8540	9600	9100	4080
25	700	400	300	260	220	200	300	4300	9420	9800	9660	3800
26	700	400	280	240	220	200	300	4900	10500	10000	9740	3400
27	700	400	280	240	220	200	350	5800	9660	10100	9030	3000
28	700	350	280	240	220	200	350	5900	8890	9820	7980	2600
29	600	350	280	240	---	200	400	5800	6740	9600	7460	2200
30	600	350	280	240	---	200	400	5400	6560	10000	6380	2000
31	600	---	280	240	---	200	---	5250	---	10500	5400	---
TOTAL	26800	13900	9680	8140	6400	6300	7500	86510	229510	294630	284530	135350
MEAN	865	463	312	263	229	203	250	2791	7650	9504	9178	4512
MAX	1200	600	350	280	240	220	400	5900	10500	12500	11200	8190
MIN	600	350	280	240	220	200	200	500	5900	7100	5400	2000
CFSM	.91	.49	.33	.28	.24	.21	.26	2.94	8.05	10.0	9.66	4.75
IN.	1.05	.54	.38	.32	.25	.25	.29	3.39	8.99	11.54	11.14	5.30
AC-FT	53160	27570	19200	16150	12690	12500	14880	171600	455200	584400	564400	268500

CAL YR 1978 TOTAL 960920 MEAN 2633 MAX 13700 MIN 230 CFSM 2.77 IN 37.63 AC-FT 1906000
WTR YR 1979 TOTAL 1109250 MEAN 3039 MAX 12500 MIN 200 CFSM 3.20 IN 43.44 AC-FT 2200000

15291000 SUSITNA RIVER NEAR DENALI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957-66, 1968-69, 1974 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1974 to current year (seasonal).

INSTRUMENTATION.--Temperature recorder since Aug. 29, 1974.

REMARKS.--No record Nov. 15 to May 22, when temperature sensor froze in ice, and July 13-31, when pen stopped inking. Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by temperature cross-sections on Aug. 1, 27 and Sept. 24. A maximum variation of 3.0°C was found within the cross sections.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 11.0°C June 11, 1977; minimum, 0.0°C on most days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 10.0°C May 26-29, June 4-5, 30, and July 3-4, but may have been higher during period of no record, July 13-31. Minimum, 0.0°C on most days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SAMP-LING DEPTH (FT)	DEPTH AT SAMPLE LOC-ATION, TOTAL (FEET)	PER-CENT OF TOTAL DEPTH	TEMPER-ATURE (DEG C)
AUG						
01...	1259	5.0	--	--	--	7.7
01...	1301	36	1.2	6.20	--	7.4
01...	1302	36	3.7	6.20	--	7.5
01...	1303	36	5.0	6.20	--	7.5
01...	1304	316	1.3	2.10	--	6.0
01...	1305	796	1.0	5.10	--	5.6
01...	1306	796	3.0	5.10	--	5.6
01...	1307	796	4.1	5.10	--	5.7
01...	1308	876	1.4	7.00	--	4.5
01...	1309	876	4.2	7.00	--	4.5
01...	1310	876	5.6	7.00	--	4.6
01...	1311	916	2.3	11.4	--	4.6
01...	1312	916	6.8	11.4	--	4.6
01...	1313	916	9.1	11.4	--	4.6
27...	1929	5.0	--	--	--	8.2
27...	1931	165	.3	1.30	20	7.7
27...	1932	165	1.0	1.30	80	7.7
27...	1933	325	.8	4.10	20	6.9
27...	1934	325	2.5	4.10	60	6.9
27...	1935	325	3.3	4.10	80	6.9
27...	1936	545	.5	2.50	20	6.4
27...	1937	545	1.5	2.50	60	6.4
27...	1938	545	2.0	2.50	80	6.4
27...	1939	745	.7	3.30	20	5.8
27...	1940	745	2.0	3.30	60	5.8
27...	1941	745	2.6	3.30	80	5.8
27...	1942	885	.6	2.90	20	5.7
27...	1943	885	1.7	2.90	60	5.7
27...	1944	885	2.3	2.90	80	5.7
27...	1945	940	--	--	--	5.6
SEP						
24...	1529	5.0	--	--	--	5.2
24...	1530	195	.5	--	--	5.0
24...	1531	195	1.6	--	--	5.0
24...	1533	685	.5	--	--	4.4
24...	1534	685	1.6	--	--	4.4
24...	1536	805	1.0	--	--	4.4
24...	1537	805	2.9	--	--	4.4
24...	1538	805	3.8	--	--	4.4
24...	1539	855	1.1	--	--	4.2
24...	1540	855	3.2	--	--	4.3
24...	1541	855	4.2	--	--	4.3
24...	1542	915	1.1	--	--	4.3
24...	1543	915	3.4	--	--	4.3
24...	1544	915	4.6	--	--	4.3
24...	1545	940	--	--	--	4.3

15291000 SUSITNA RIVER NEAR DENALI--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM WIDTH (FT)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
MAY									
23...	2100	--	3880	--	452	4740	--	--	--
JUN									
29...	0900	--	7100	--	640	12300	14	18	22
AUG									
01...	1300	946	10500	--	--	--	--	--	--
27...	1930	948	8050	--	734	16000	20	25	32
SEP									
24...	1600	945	4100	10.0	165	1830	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
MAY								
23...	--	--	25	--	--	--	--	--
JUN								
29...	28	35	43	61	78	96	99	100
AUG								
01...	--	--	--	--	--	--	--	--
27...	41	50	61	72	87	98	100	--
SEP								
24...	--	--	54	67	84	98	100	--

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	2.0	1.5	.5	.5								
2	1.5	1.0	.5	.5								
3	1.0	1.0	.5	.5								
4	1.0	1.0	.5	.5								
5	1.0	1.0	.5	.5								
6	2.0	1.0	.5	.5								
7	2.0	2.0	.5	.5								
8	2.5	2.0	2.0	.5								
9	2.5	2.5	1.0	1.0								
10	2.5	1.0	1.0	1.0								
11	1.0	1.0	1.0	1.0								
12	1.0	1.0	1.0	.5								
13	1.0	1.0	.5	.5								
14	1.0	1.0	2.0	.5								
15	1.0	1.0	---	---								
16	1.0	1.0	---	---								
17	1.0	1.0	---	---								
18	1.0	1.0	---	---								
19	1.0	1.0	---	---								
20	1.0	1.0	---	---								
21	1.0	1.0	---	---								
22	1.0	1.0	---	---								
23	1.0	1.0	---	---								
24	1.0	1.0	---	---								
25	1.0	1.0	---	---								
26	1.0	1.0	---	---								
27	1.0	1.0	---	---								
28	1.0	1.0	---	---								
29	1.0	.5	---	---								
30	.5	.5	---	---								
31	.5	.5	---	---								
MONTH	2.5	.5	2.0									

15291000 SUSITNA RIVER NEAR DENALI--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1			---	---	9.5	7.0	---	---	6.0	3.0	5.5	3.5
2			---	---	9.0	7.0	---	---	6.0	3.5	5.5	3.5
3			---	---	9.5	7.0	10.0	5.5	6.0	3.5	5.5	3.5
4			---	---	10.0	7.0	10.0	5.5	6.0	3.5	5.5	3.5
5			---	---	10.0	7.0	7.5	5.5	6.0	3.5	5.5	3.0
6			---	---	9.0	7.0	5.5	5.0	4.0	3.5	6.0	3.0
7			---	---	7.0	6.0	8.5	5.0	5.5	4.0	6.0	3.0
8			---	---	8.5	6.0	8.5	5.0	6.0	4.5	6.0	3.0
9			---	---	9.5	6.5	8.0	5.0	5.5	4.0	5.5	3.0
10			---	---	9.5	6.0	8.0	5.0	5.5	5.0	5.5	3.0
11			---	---	7.0	6.0	---	---	7.0	4.5	5.5	2.5
12			---	---	7.5	5.5	8.5	5.0	7.0	4.0	5.0	2.5
13			---	---	8.0	5.5	---	---	7.0	3.5	4.5	3.5
14			---	---	8.0	5.5	---	---	7.0	4.5	4.0	4.0
15			---	---	8.5	5.5	---	---	5.5	4.5	4.0	3.5
16			---	---	8.5	5.5	---	---	5.5	5.0	3.5	3.0
17			---	---	7.5	5.5	---	---	5.5	4.0	3.5	3.0
18			---	---	7.5	5.5	---	---	5.5	4.0	3.5	3.0
19			---	---	7.5	5.5	---	---	6.5	4.5	4.0	3.5
20			---	---	7.0	6.0	---	---	6.5	4.0	4.0	4.0
21			---	---	9.0	5.5	---	---	6.5	3.5	4.0	4.0
22			---	---	9.5	6.0	---	---	7.0	4.0	4.0	4.0
23			6.5	6.0	9.5	6.0	---	---	7.0	4.0	4.0	4.0
24			7.0	4.0	8.0	5.5	---	---	7.0	4.0	4.0	3.5
25			9.0	5.0	8.0	5.5	---	---	7.0	4.5	---	---
26			10.0	6.0	5.5	4.5	---	---	7.0	4.0	---	---
27			10.0	7.0	5.5	5.0	---	---	6.0	4.0	---	---
28			10.0	7.0	7.0	5.5	---	---	5.5	3.5	---	---
29			10.0	7.0	9.0	6.0	---	---	5.5	3.5	---	---
30			7.5	6.0	10.0	6.0	---	---	5.5	3.0	---	---
31			9.5	6.0	---	---	---	---	5.5	3.5	---	---
MONTH			10.0		10.0	4.5			7.0	3.0	6.0	
YEAR	10.0											

15291200 MACLAREN RIVER NEAR PAXSON

LOCATION.--Lat 63°07'10", long 146°31'45", Matanuska-Susitna Borough, Hydrologic Unit 19050002, near left bank on downstream side of bridge on Denali Highway, 1.5 mi (2.4 km) downstream from Boulder Creek, and 34 mi (55 km) west of Paxson.

DRAINAGE AREA.--280 mi² (730 km²), approximately.

PERIOD OF RECORD.--June 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,865.84 ft (873.508 m) National Geodetic Vertical Datum (Alaska Department of Public Works bench mark). See WSP 2136 for history of changes prior to Aug. 23, 1968.

REMARKS.--Records poor for period of no gage-height record prior to June 27, good thereafter. Streamflow augmented by Maclaren Glacier, which covers 19 percent of the basin. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--21 years, 975 ft³/s (27.61 m³/s), 47.29 in/yr (1,201 mm/yr), 706,400 acre-ft/yr (871 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,260 ft³/s (262 m³/s) Aug. 11, 1971, gage height, 8.24 ft (2.512 m), from rating curve extended above 5,300 ft³/s (150 m³/s); maximum gage height, 9.10 ft (2.774 m) in May 1964, from floodmarks, backwater from ice; minimum daily discharge, about 40 ft³/s (1.1 m³/s) Mar. 1-25, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,380 ft³/s (124 m³/s) June 26, gage height, 5.6 ft (1.71 m), from floodmarks, only peak above base of 4,200 ft³/s (120 m³/s); minimum daily, about 100 ft³/s (3.0 m³/s) Mar. 1 to Apr. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	400	240	160	130	110	100	100	160	1800	2200	2830	1010
2	400	240	160	130	110	100	100	160	2000	2470	2820	877
3	400	240	160	130	110	100	100	180	2000	2640	2770	793
4	360	240	160	130	110	100	100	180	2000	2850	2900	732
5	360	200	160	130	110	100	100	200	2200	3330	2970	672
6	360	200	160	130	110	100e	100	200	2200	3730	2730	660
7	360	200	160	130	110	100	100	200	2200	3520	2730	709
8	360	200	160	120	110	100	100	250	2200	3190	2640	775
9	360	200	140	120	110	100	100	250	2400	3000	2410	845
10	320	200	140	120	110	100	100	250	2500	2930	2170	880
11	320	200	140	120	110	100	100	300	2500	2960	2040	902
12	320	200	140	120	110	100	100	300	2400	3140	2250	923
13	320	200	140	120	110	100	100	300	2100	3240	2390	971
14	320	200	140	120	110	100	100	350	1900	3160	2190	1770
15	320	200	140	120	110	100	110	350	1900	3030	2200	1960
16	320	180	140	120	110	100	110	400	2000	2920	2140	1820
17	280	180	140	120	110	100	110	450	2000	2980	2390	1590
18	280	180	140	120	110	100	110	500	2100	3040	2270	1390
19	280	180	140	120	110	100	110	600	2400	2910	2020	1270
20	280	180	140	120	110	100	110	700	2600	2950	2030	1410
21	280	180	140	120	110	100	120	800	2800	2830	1890	1560
22	280	180	140	120	110	100	120	900	2800	3570	1740	1490
23	280	180	130	120	110	100	120	920	2800	3430	1840	1410
24	280	180	130	120	110	100	120	950	3000	3090	2060	1380
25	240	180	130	120	110	100	120	1000	3500	3140	2290	1300
26	240	160	130	120	110	100	120	1200	4200	3480	2310	1200
27	240	160	130	120	110	100	120	1400	3200	3110	2080	1100
28	240	160	130	120	110	100	140	1600	2800	2950	1750	1000
29	240	160	130	120	---	100	140	1600	2310	2870	1510	900
30	240	160	130	120	---	100	140	1500	2090	2980	1370	800
31	240	---	130	120	---	100	---	1500	---	3090	1170	---
TOTAL	9520	5760	4410	3790	3080	3100	3320	19650	72900	94730	68900	34099
MEAN	307	192	142	122	110	100	111	634	2430	3056	2223	1137
MAX	400	240	160	130	110	100	140	1600	4200	3730	2970	1960
MIN	240	160	130	120	110	100	100	160	1800	2200	1170	660
CFSM	1.10	.69	.51	.44	.39	.36	.40	2.26	8.68	10.9	7.94	4.06
IN.	1.26	.77	.59	.50	.41	.41	.44	2.61	9.69	12.59	9.15	4.53
AC-FT	18880	11420	8750	7520	6110	6150	6590	38980	144600	187900	136700	67640

CAL YR 1978 TOTAL 327730 MEAN 898 MAX 3850 MIN 120 CFSM 3.21 IN 43.54 AC-FT 650100
WTR YR 1979 TOTAL 323259 MEAN 885 MAX 4200 MIN 100 CFSM 3.16 IN 42.95 AC-FT 641200

15292000 SUSITNA RIVER AT GOLD CREEK

LOCATION.--Lat 62°46'04", long 149°41'28", in NW¼ sec.20, T.31 N., R.2 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, near left bank under Alaska Railroad bridge, 0.1 mi (0.2 km) downstream from Gold Creek, 0.9 mi (1.4 km) north of Gold Creek railroad station, and 2.0 mi (3.2 km) downstream from Indian River.

DRAINAGE AREA.--6,160 mi² (15,950 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 676.50 ft (206.197 m) National Geodetic Vertical Datum of 1929. Prior to June 6, 1957, nonrecording gage at same site and datum. June 7, 1957 to June 2, 1964, water-stage recorder at site 0.3 mi (0.5 km) upstream at same datum.

REMARKS.--Water-discharge records good except those for Nov. 11 to May 20, which are poor.

AVERAGE DISCHARGE.--30 years, 9,612 ft³/s (272.2 m³/s), 21.19 in/yr (538 mm/yr), 6,964,000 acre-ft/yr (8.59 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 90,700 ft³/s (2,570 m³/s) June 7, 1964, gage height, 16.58 ft (5.054 m); maximum gage height observed, 24.48 ft (7.462 m) May 10, 1954, ice jam; minimum daily discharge, about 600 ft³/s (17 m³/s) Feb. 16-20, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 41,300 ft³/s (1,170 m³/s) July 16, gage height, 12.70 ft (3.871 m); minimum daily, about 1,200 ft³/s (34 m³/s) Feb. 25 to Apr. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5600	3400	1900	1500	1300	1200	1200	2500	29100	21800	28100	12100
2	5400	3340	1900	1500	1300	1200	1200	2700	31500	22100	28400	11000
3	5420	3270	1900	1500	1300	1200	1200	2900	32500	21900	26200	10300
4	5180	3270	1900	1400	1300	1200	1200	3200	29700	22100	24300	9800
5	5150	3350	1900	1400	1300	1200	1200	3500	28000	26200	23400	9200
6	5300	3340	1900	1400	1300	1200	1200	3800	28100	34800	24100	8890
7	5780	3450	1900	1400	1300	1200	1200	4200	26700	35700	26200	8470
8	6150	3280	1900	1400	1300	1200	1200	4500	23800	31000	27000	8470
9	6570	3000	1900	1400	1300	1200	1200	5000	23600	28100	27000	8580
10	6570	2860	1800	1400	1300	1200	1200	5500	26200	26000	24200	8820
11	6300	2600	1800	1400	1300	1200	1300	6000	28100	24100	21700	8890
12	5920	2600	1800	1400	1300	1200	1300	7000	26200	24200	20400	8890
13	5550	2400	1700	1400	1300	1200	1300	8000	23600	24600	19900	9030
14	5420	2400	1700	1400	1300	1200	1300	9000	20900	24600	19900	9310
15	5150	2400	1700	1400	1300	1200	1300	10000	18600	28700	19500	10900
16	4720	2200	1600	1400	1300	1200	1300	12000	17900	39300	19900	13400
17	4520	2200	1600	1400	1300	1200	1400	14000	18800	34700	20000	12800
18	4850	2200	1600	1400	1300	1200	1400	15000	19200	30300	20600	12800
19	5020	2200	1600	1400	1300	1200	1400	16000	19400	30800	19300	12800
20	5200	2200	1600	1400	1300	1200	1400	17000	20500	29600	17600	13200
21	4850	2000	1500	1400	1300	1200	1500	17200	22500	28900	18000	14800
22	4500	2000	1500	1400	1300	1200	1500	17400	23000	29600	17400	15000
23	3550	2000	1500	1400	1300	1200	1600	18000	22400	36500	15600	13700
24	2870	2000	1500	1400	1300	1200	1700	19800	22800	33300	15500	12800
25	3150	2000	1500	1400	1200	1200	1700	21200	24300	31300	16000	12100
26	3640	2000	1500	1400	1200	1200	1800	23400	27600	34800	17000	11200
27	4020	2000	1500	1400	1200	1200	1900	28700	29300	33600	17100	9840
28	3960	2000	1500	1300	1200	1200	2000	33200	28300	28100	16500	9240
29	3740	2000	1500	1300	---	1200	2100	34400	25700	26100	14900	8680
30	4060	2000	1500	1300	---	1200	2300	34100	22400	26100	14600	8220
31	3900	---	1500	1300	---	1200	---	30700	---	26400	14000	---
TOTAL	152130	76040	52100	43300	36000	37200	43500	429900	740700	895300	634300	323230
MEAN	4907	2535	1681	1397	1286	1200	1450	13870	24690	28880	20460	10770
MAX	6570	3400	1900	1500	1300	1200	2300	34400	32500	39300	28400	15000
MIN	2870	2000	1500	1300	1200	1200	1200	2500	17900	21800	14000	8220
CFSM	.80	.41	.27	.23	.21	.20	.24	2.25	4.01	4.69	3.32	1.75
IN.	.92	.46	.31	.26	.22	.22	.26	2.60	4.47	5.41	3.83	1.95
AC-FT	301700	150800	103300	85890	71410	73790	86280	852700	1469000	1776000	1258000	641100

CAL YR 1978 TOTAL 2850490 MEAN 7810 MAX 24300 MIN 1500 CFSM 1.27 IN 17.21 AC-FT 5654000
WTR YR 1979 TOTAL 3463700 MEAN 9490 MAX 39300 MIN 1200 CFSM 1.54 IN 20.92 AC-FT 6870000

NOTE.--No gage-height record Dec. 26 to May 20.

15292000 SUSITNA RIVER AT GOLD CREEK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1949-58, 1962, 1967-68, 1974 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June to September 1957, July 1974 to September 1978 (seasonal and fragmentary), October 1978 to September 1979.
SUSPENDED-SEDIMENT DISCHARGE: May to September 1952, June to September 1957.

INSTRUMENTATION.--Temperature recorder since July 30, 1974.

REMARKS.--No record Dec. 16 to May 21 and July 10-31, sensor frozen in ice and clock stopped; respectively.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 15.0°C July 3, 4 (may have been greater during period of no record July 10-31); minimum, 0.0°C on most days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SAMP- LING DEPTH (FT)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	TEMPER- ATURE (DEG C)
JUL					
10...	1431	60	1.6	8.00	12.3
10...	1432	60	6.4	8.00	12.3
10...	1433	130	2.2	10.8	12.3
10...	1434	130	8.6	10.8	12.3
10...	1435	185	2.5	12.5	12.1
10...	1436	185	10	12.5	12.2
10...	1437	230	2.5	12.5	12.1
10...	1438	230	10	12.5	12.1
10...	1439	290	2.3	11.3	12.0
10...	1440	290	9.0	11.3	12.0
10...	1441	345	1.5	7.60	12.0
10...	1442	345	6.1	7.60	12.0
10...	1443	400	3.5	5.80	12.0

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM
MAY								
21...	1450	17400	168	7890	--	--	--	--
JUL								
10...	1430	25700	627	43500	16	21	27	34
SEP								
05...	1430	8820	67	1600	--	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
MAY							
21...	--	--	--	--	--	--	--
JUL							
10...	40	47	56	72	91	98	98
SEP							
05...	--	--	--	--	--	--	--

15292000 SUSITNA RIVER AT GOLD CREEK- Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	4.5	3.5	1.5	.0	.0	.0						
2	4.0	3.0	.5	.0	.5	.0						
3	3.0	2.5	.0	.0	.5	.0						
4	3.0	2.0	.0	.0	.5	.0						
5	3.5	3.0	1.0	.0	.5	.0						
6	4.5	3.5	1.0	.5	.5	.0						
7	4.0	3.5	1.0	.0	.5	.5						
8	4.5	4.0	.5	.0	.5	.5						
9	4.5	4.0	.0	.0	.5	.5						
10	4.0	3.0	.5	.0	.5	.5						
11	3.5	3.0	.5	.0	.5	.0						
12	3.0	1.5	.5	.0	.0	.0						
13	2.5	2.0	.5	.0	.0	.0						
14	2.5	1.5	.0	.0	.0	.0						
15	1.5	.5	.0	.0	.0	.0						
16	.5	.5	.0	.0	---	---						
17	1.0	.5	.0	.0	---	---						
18	2.0	.5	.0	.0	---	---						
19	1.5	1.0	.0	.0	---	---						
20	2.0	1.0	.0	.0	---	---						
21	1.5	.5	.0	.0	---	---						
22	1.0	.5	.0	.0	---	---						
23	1.5	.5	.0	.0	---	---						
24	1.5	.5	.0	.0	---	---						
25	1.5	.5	.0	.0	---	---						
26	2.5	1.0	.0	.0	---	---						
27	1.0	.5	.5	.0	---	---						
28	1.0	.5	.5	.5	---	---						
29	1.5	.5	.5	.0	---	---						
30	1.0	.5	.5	---	---	---						
31	1.0	.5	---	---	---	---						
MONTH	4.5	.5	1.5	.0	.5	.0						

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	7.0	4.5	13.0	10.0	13.0	11.5	9.0	6.5
2			---	---	6.5	5.0	14.0	11.5	13.0	11.0	10.0	7.5
3			---	---	6.5	5.0	15.0	13.0	13.5	11.5	9.5	7.0
4			---	---	7.0	5.5	15.0	13.5	13.5	12.0	9.0	7.0
5			---	---	7.5	5.5	13.5	10.5	12.5	12.0	9.0	7.0
6			---	---	6.5	5.5	10.5	9.5	12.0	11.0	9.0	7.0
7			---	---	7.0	5.5	10.5	9.0	11.5	11.0	9.0	7.0
8			---	---	8.0	6.0	10.5	9.0	12.0	10.5	9.5	7.0
9			---	---	8.5	6.5	11.5	10.0	11.5	10.5	9.5	7.5
10			---	---	8.0	7.5	---	---	11.5	10.5	9.5	7.5
11			---	---	8.5	7.0	---	---	12.0	10.5	9.5	7.5
12			---	---	9.0	7.0	---	---	12.5	10.5	9.5	7.5
13			---	---	8.0	7.5	---	---	12.5	10.5	9.0	8.0
14			---	---	8.5	7.0	---	---	12.0	11.0	9.0	8.0
15			---	---	9.0	7.0	---	---	11.0	10.5	8.5	8.0
16			---	---	8.5	8.0	---	---	11.5	10.5	8.5	7.5
17			---	---	9.5	8.0	---	---	11.0	10.0	8.0	7.5
18			---	---	9.5	8.0	---	---	11.0	9.5	7.5	7.0
19			---	---	9.5	9.0	---	---	11.0	10.0	7.5	7.0
20			---	---	11.0	9.0	---	---	11.0	10.5	7.5	7.0
21			---	---	11.5	9.5	---	---	11.5	10.0	7.0	6.5
22			7.0	4.5	12.5	10.0	---	---	11.0	9.5	7.0	6.5
23			7.0	5.5	13.5	11.0	---	---	12.0	9.5	7.0	6.5
24			7.0	5.0	12.0	10.5	---	---	12.5	10.0	6.5	6.0
25			8.0	5.0	10.5	8.0	---	---	12.5	10.5	6.5	5.0
26			8.0	6.0	8.0	7.5	---	---	13.0	11.5	6.0	4.5
27			7.5	5.0	8.0	7.0	---	---	12.5	11.0	5.0	4.0
28			7.5	5.0	8.5	7.0	---	---	11.5	10.0	5.0	4.0
29			6.5	5.0	9.0	7.5	---	---	10.0	8.5	4.5	3.5
30			6.0	4.5	10.5	8.0	---	---	9.0	8.5	4.5	3.5
31			7.0	4.5	---	---	---	---	8.5	7.5	---	---
MONTH			8.0		13.5	4.5			13.5	7.5	10.0	3.5
YEAR	15.0	.0										

15292700 TALKEETNA RIVER NEAR TALKEETNA
(Hydrologic bench-mark station)

LOCATION.--Lat 62°20'49", long 150°01'01", in NE¼ sec.16, T.26 N., R.4 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on left bank 1.7 mi (2.7 km) downstream from Chunilna Creek, 3.5 mi (5.6 km) northeast of Talkeetna, and about 5 mi (8 km) above mouth.

DRAINAGE AREA.--2,006 mi² (5,196 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 400 ft (120 m), from topographic map.

REMARKS.--Water-discharge records fair except those for period of no gage-height record, Nov. 7 to May 10, which are poor.

AVERAGE DISCHARGE.--15 years, 4,029 ft³/s (114.1 m³/s), 27.28 in/yr (693 mm/yr), 2,919,000 acre-ft/yr (3.60 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 67,400 ft³/s (1,910 m³/s) Aug. 10, 1971, gage height, 16.35 ft (4.983 m); minimum daily, about 380 ft³/s (10.8 m³/s) Feb. 21 to Apr. 10, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 32,000 ft³/s (906 m³/s) July 15, gage height, 11.35 ft (3.459 m); minimum daily, about 540 ft³/s (15 m³/s) Mar. 24 to Apr. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2240	1160	1000	850	700	620	540	1800	17000	9180	15800	4150
2	2380	1360	1000	850	700	620	540	2100	20100	9460	15700	3970
3	2320	1400	1000	800	700	620	540	2300	20500	10000	13400	3970
4	2180	1390	1000	800	680	620	540	2600	15300	10800	11800	3690
5	1930	1520	1000	800	680	620	550	3000	14700	15200	10800	3550
6	1970	1320	1000	800	680	620	550	3500	17000	18700	10400	3430
7	1590	1300	1000	800	680	600	550	4000	14200	15900	10200	3330
8	1970	1200	950	800	680	600	550	5000	11000	12800	9480	3270
9	1680	1200	950	800	660	600	550	4600	12400	11800	9040	3290
10	1670	1200	950	800	660	600	550	4350	15600	11000	8790	3250
11	1460	1200	950	780	660	600	550	4420	15400	10300	7570	3220
12	1280	1200	950	780	660	580	550	4650	11600	10900	7570	3220
13	1770	1100	950	760	660	580	550	5120	9400	12400	7600	3350
14	1180	1100	950	760	640	580	550	5680	8050	14100	7360	3550
15	1870	1100	950	760	640	580	550	5740	7090	25200	7240	3550
16	1840	1100	950	760	640	580	550	6340	7600	28000	6280	3550
17	1860	1100	950	760	640	580	550	6280	7480	22000	6550	3370
18	1780	1100	950	760	640	580	560	6610	7660	17100	7540	3950
19	1540	1100	900	760	640	560	580	6790	7960	16700	7120	4320
20	1350	1000	900	740	640	560	600	7060	8140	14800	7390	5300
21	1250	1000	900	740	640	560	640	7390	10200	14200	6790	6760
22	1330	1000	900	740	620	560	700	7460	10600	14300	6340	6130
23	1670	1000	900	740	620	560	760	8140	11000	12900	6490	5350
24	1660	1000	900	720	620	540	840	9400	11000	11000	6790	5000
25	1650	1000	900	720	620	540	900	10300	12400	15500	7090	4680
26	1390	1000	900	720	620	540	1000	12100	16800	20700	6910	4300
27	1120	1000	850	720	620	540	1100	19000	12500	14800	7090	4070
28	1320	1000	850	700	620	540	1300	20400	9860	11900	6360	4000
29	1560	1000	850	700	---	540	1400	20700	9340	10800	5770	4000
30	1460	1000	850	700	---	540	1600	19500	8540	10700	5190	3890
31	1180	---	850	700	---	540	---	16000	---	14400	4580	---
TOTAL	51450	34150	28900	23620	18260	17900	21290	241480	360420	447560	256500	121160
MEAN	1660	1138	932	762	652	577	710	7790	12010	14440	8274	4039
MAX	2380	1520	1000	850	700	620	1600	20700	20500	28000	15800	6760
MIN	1120	1000	850	700	620	540	540	1800	7090	9180	4580	3220
CFSM	.83	.57	.47	.38	.33	.29	.35	3.88	5.99	7.20	4.13	2.01
IN.	.95	.63	.54	.44	.34	.33	.39	4.48	6.68	8.30	4.76	2.25
AC-FT	102100	67740	57320	46850	36220	35500	42230	479000	714900	887700	508800	240300

CAL YR 1978 TOTAL 1162570 MEAN 3185 MAX 14800 MIN 460 CFSM 1.59 IN 21.56 AC-FT 2306000
WTR YR 1979 TOTAL 1622670 MEAN 4446 MAX 28000 MIN 540 CFSM 2.22 IN 30.09 AC-FT 3219000

15292700 TALKEETNA RIVER NEAR TALKEETNA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954, 1966 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	BARO- METRIC PRES- SURE (MM OF HG)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
JAN												
25...	1330	228	--	724	195	--	--	--	--	740	K7	K7
25...	1331	--	184	--	190	6.8	.0	13.3	94	--	--	--
25...	1332	--	166	--	195	6.8	.0	13.2	93	--	--	--
25...	1333	--	148	--	195	6.6	.0	13.2	93	--	--	--
25...	1334	--	108	--	195	6.8	.0	--	--	--	--	--
APR												
05...	1100	196	--	550	--	--	--	--	--	--	K130	K92
05...	1101	--	50	--	205	6.9	.0	12.4	--	--	--	--
05...	1102	--	90	--	200	7.0	.0	--	--	--	--	--
05...	1103	--	135	--	195	7.0	.0	12.8	--	--	--	--
MAY												
10...	1530	--	--	4290	--	6.2	--	--	--	--	K27	<1
10...	1532	320	34	--	95	--	4.6	--	--	--	--	--
10...	1533	--	250	--	125	--	4.9	--	--	--	--	--
10...	1534	--	330	--	135	--	5.1	--	--	--	--	--
JUN												
28...	1330	--	--	9470	95	6.6	7.5	10.4	88	750	K13	K5
AUG												
02...	1630	--	--	15100	92	7.2	11.0	10.7	96	754	K16	K32
SEP												
06...	1000	--	--	3250	--	--	--	--	--	--	--	--

DATE	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
JAN												
25...	K2	65	19	22	2.5	12	1.4	56	0	12	26	.1
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
05...	K1	65	29	22	2.5	13	1.3	--	--	11	34	.1
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
10...	<1	42	16	14	1.6	7.5	1.2	31	0	7.4	13	.1
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
28...	K2	--	--	--	--	--	--	--	--	11	4.6	.0
AUG												
02...	K5	38	3	13	1.3	3.1	.8	43	0	11	2.9	.1
SEP												
06...	--	--	--	--	--	--	--	--	--	--	--	--

K NON-IDEAL COLONY COUNT

15292700 TALKEETNA RIVER NEAR TALKEETNA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)
JAN												
25...	9.2	116	113	.41	--	.00	--	0	0	1	10	4
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
05...	9.4	120	115	.39	--	.01	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
10...	7.8	81	68	1.0	--	.01	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
28...	6.5	--	--	--	.25	--	.01	--	--	--	--	--
AUG												
02...	6.4	54	60	.15	--	.16	--	--	--	--	--	--
SEP												
06...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
JAN											
25...	10	10	0	.1	0	0	10	.00	2	3.9	--
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
APR											
05...	--	--	--	--	--	--	--	--	3	4.5	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
MAY											
10...	--	--	--	--	--	--	--	--	116	1340	--
10...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
JUN											
28...	--	--	--	--	--	--	--	--	187	4780	32
AUG											
02...	--	--	--	--	--	--	--	--	947	38600	58
SEP											
06...	--	--	--	--	--	--	--	--	70	614	--

15294005 WILLOW CREEK NEAR WILLOW

LOCATION.--Lat 61°46'49", long 149°52'44", in NE¼SE¼ sec.31, T.20 N., R.3 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on left bank 0.7 mi (1.1 km) downstream from unnamed tributary, 5.7 mi (9.2 km) northeast of Willow, and 6.9 mi (11.1 km) upstream from Deception Creek.

DRAINAGE AREA.--166 mi² (430 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 350 ft (107 m), from topographic map.

REMARKS.--Water-discharge records good except those for Nov. 9 to Apr. 21, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,720 ft³/s (105 m³/s) May 28, 1979, gage height, 7.82 ft (2.384 m); minimum daily, about 50 ft³/s (1.4 m³/s) Nov. 22-25, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,720 ft³/s (105 m³/s) May 28, gage height, 7.82 ft (2.384 m); minimum daily, about 50 ft³/s (1.4 m³/s) Nov. 22-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	214	187	75	90	78	70	70	382	2530	864	800	222
2	260	163	76	90	78	70	66	434	2560	920	779	210
3	235	159	80	90	76	68	66	474	2020	1020	682	197
4	218	182	90	90	76	68	65	484	1760	1080	610	196
5	226	190	100	90	76	68	64	540	1860	1920	570	190
6	233	180	110	90	76	68	64	585	2040	2140	620	185
7	224	168	120	90	76	68	64	626	1540	1710	560	180
8	231	130	130	90	76	68	64	676	1470	1320	560	179
9	226	100	135	85	76	68	64	595	1590	1170	488	176
10	210	85	130	85	76	68	64	506	1740	1100	448	173
11	244	75	130	85	76	66	64	535	1680	1020	421	172
12	291	70	130	85	76	66	64	560	1480	1250	393	170
13	272	65	130	85	76	66	66	642	1320	1170	368	172
14	246	60	130	85	74	66	66	724	1150	1100	374	173
15	216	58	130	80	74	66	66	786	1100	1760	378	167
16	216	56	120	80	74	66	66	848	1080	1530	343	166
17	235	54	120	80	74	68	68	832	1000	1210	337	203
18	374	54	120	80	74	68	72	856	960	1280	327	484
19	283	52	120	80	74	68	80	888	928	1160	300	510
20	255	52	120	80	74	70	90	920	1000	984	294	912
21	239	52	115	80	72	75	110	1020	1020	1070	294	1100
22	231	50	110	80	72	90	113	1110	984	992	267	758
23	185	50	110	80	72	100	116	1140	1040	880	255	676
24	239	50	100	80	72	100	129	1240	1070	840	244	700
25	220	50	100	80	72	100	142	1390°	1530	1240	239	570
26	212	54	100	80	70	95	157	1850	1980	1090	233	502
27	203	62	100	80	70	90	160	2310	1410	856	226	461
28	189	70	95	80	70	85	180	2700	1160	758	222	456
29	201	74	95	80	---	82	231	2700	1010	730	228	409
30	196	74	95	78	---	78	294	2180	880	688	255	378
31	179	---	95	78	---	75	---	2160	---	920	233	---
TOTAL	7203	2726	3411	2586	2080	2324	2985	32693	42892	35772	12348	11047
MEAN	232	90.9	110	83.4	74.3	75.0	99.5	1055	1430	1154	398	368
MAX	374	190	135	90	78	100	294	2700	2560	2140	800	1100
MIN	179	50	75	78	70	66	64	382	880	688	222	166
CFSM	1.40	.55	.66	.50	.45	.45	.60	6.36	8.61	6.95	2.40	2.22
IN.	1.61	.61	.76	.58	.47	.52	.67	7.33	9.61	8.02	2.77	2.48
AC-FT	14290	5410	6770	5130	4130	4610	5920	64850	85080	70950	24490	21910

WTR YR 1979 TOTAL 158067 MEAN 433 MAX 2700 MIN 50 CFSM 2.61 IN 35.42 AC-FT 313500

NOTE.--No gage-height record Nov. 16 to Apr. 3.

15294005 WILLOW CREEK NEAR WILLOW--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1979.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1978, April to September 1979.

INSTRUMENTATION.--Temperature recorder since Oct. 5, 1978

REMARKS.--No record Oct. 10 to Apr. 4 and June 14-21 due to recorder or clock malfunction.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 15.5°C July 3; minimum, 0.0°C most days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT											
05...	1700	238	75	6.7	5.0	12.6	K6	K6	<1	23	3

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT											
05...	7.0	1.4	4.4	.7	25	0	2.8	6.9	.0	7.8	44

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)
OCT										
05...	.07	.07	.00	.00	.29	.28	.29	.01	.28	.36

DATE	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)
OCT										
05...	.35	.00	.00	0	0	0	3	140	40	100

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT										
05...	2	0	0	0	.0	0	0	10	2	1.3

K NON-IDEAL COLONY COUNT

15294005 WILLOW CREEK NEAR WILLOW--Continued

TEMPERATURE (DEG. C) OF WATER, OCTOBER 1978

DAY	MAX	MIN	DAY	MAX	MIN
6	5.0	4.5	8	5.0	4.5
7	4.5	4.0	9	5.0	4.0

TEMPERATURE (DEG. C) OF WATER, APRIL TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	1.5	.0	8.5	4.0	13.5	7.0	13.5	9.5	10.5	7.0
2	---	---	1.5	.5	7.0	4.0	14.5	8.0	14.5	10.0	10.5	7.0
3	---	---	1.5	.5	7.5	3.0	15.5	8.5	15.0	10.0	10.0	8.0
4	---	---	3.0	1.0	8.0	4.0	15.0	9.0	15.0	9.5	10.0	7.0
5	1.0	.0	2.5	1.0	9.0	4.0	11.5	8.0	13.5	10.5	10.0	7.5
6	.5	.0	3.0	1.0	7.0	5.0	8.0	7.0	12.0	10.5	10.0	7.0
7	1.0	.0	4.5	1.5	7.5	4.5	10.5	7.0	11.5	10.0	10.5	7.5
8	1.5	.5	4.5	1.5	8.5	5.0	10.5	7.0	13.0	10.0	10.5	8.0
9	1.5	.5	3.5	1.5	11.0	4.5	11.5	8.0	12.5	10.0	11.0	7.5
10	1.0	.5	5.0	1.0	9.5	5.0	13.5	7.0	12.0	10.0	11.0	10.0
11	1.5	.0	4.5	2.5	9.5	6.0	13.5	9.0	12.5	10.0	10.5	8.0
12	1.5	.0	5.0	2.0	9.5	4.5	12.5	9.0	13.5	10.5	10.5	9.0
13	1.0	.0	6.5	2.0	7.5	5.5	11.5	8.5	12.5	10.0	10.5	9.0
14	1.0	.0	6.0	2.0	---	---	11.5	8.5	12.0	10.5	10.5	9.5
15	1.0	.0	7.0	2.0	---	---	9.5	8.0	11.0	10.0	10.0	8.5
16	2.0	.0	6.0	2.0	---	---	10.0	8.0	11.0	9.5	9.5	7.5
17	2.0	.5	7.0	2.0	---	---	14.0	8.0	12.5	10.0	9.5	8.5
18	1.5	1.0	6.5	2.0	---	---	12.5	9.0	12.5	10.0	8.5	7.5
19	2.0	.5	6.0	2.5	---	---	12.5	9.0	12.5	11.0	9.0	7.0
20	1.5	.5	7.0	2.0	---	---	13.0	8.5	12.5	10.5	8.0	7.0
21	1.5	.5	7.5	2.5	---	---	13.0	10.0	13.0	8.5	7.5	6.5
22	2.0	.5	7.0	2.5	13.5	6.0	11.5	9.0	14.0	9.5	7.0	6.5
23	2.0	.0	6.0	3.0	13.5	6.5	11.5	8.5	15.0	11.0	7.5	6.0
24	1.5	.0	7.5	3.0	11.0	6.5	11.0	9.5	15.0	11.0	7.5	6.0
25	.5	.0	8.5	3.0	9.5	6.5	11.0	9.5	14.5	11.0	6.5	5.0
26	1.0	.0	9.0	3.0	7.0	5.5	12.0	7.5	14.0	11.0	6.0	4.5
27	2.0	.0	9.0	2.5	7.5	5.5	13.0	8.5	13.5	11.0	6.0	5.0
28	2.0	.0	9.0	3.0	8.5	6.0	13.0	9.0	13.5	11.0	7.0	5.0
29	1.5	.0	6.5	3.0	10.0	6.0	13.0	9.5	11.5	9.0	5.5	3.5
30	2.0	.0	6.5	3.5	12.5	6.0	13.0	10.5	10.5	7.5	6.5	3.5
31	---	---	8.0	3.0	---	---	11.5	9.5	10.5	8.0	---	---
MONTH	2.0	.0	9.0	.0	13.5	3.0	15.5	7.0	15.0	7.5	11.0	3.5
YEAR	15.5	.0										

15294010 DECEPTION CREEK NEAR WILLOW

LOCATION.--Lat 61°44'52", long 149°55'59", in NE¼SE¼ sec.11, T.19 N., R.4 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on right bank 0.5 mi (0.8 km) downstream from unnamed tributary, 3.4 mi (5.5 km) east of Willow, and 5.0 mi (8.0 km) upstream from mouth.

DRAINAGE AREA.--48.0 mi² (124.3 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 250 ft (76 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, Feb. 9 to Mar. 28, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 553 ft³/s (15.7 m³/s) May 9, 1979, gage height, 6.22 ft (1.896 m); minimum, 14 ft³/s (0.40 m³/s) Sept. 10, 1979, gage height, 3.52 ft (1.073 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 553 ft³/s (15.7 m³/s) May 9, gage height, 6.22 ft (1.896 m); minimum, 14 ft³/s (0.40 m³/s) Sept. 10, gage height, 3.52 ft (1.073 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	34	22	19	17	16	40	360	100	76	76	22
2	62	35	24	19	17	16	41	410	95	62	69	20
3	52	35	27	19	17	16	42	430	90	50	55	19
4	40	33	29	18	17	16	42	450	86	48	48	19
5	38	32	30	18	17	16	42	440	84	129	60	17
6	37	31	31	18	16	16	43	440	80	155	70	16
7	35	30	31	18	16	16	43	450	75	145	55	16
8	40	28	30	18	16	16	44	494	70	95	58	16
9	40	26	30	18	16	16	44	501	68	76	54	15
10	37	24	30	18	16	15	46	359	64	64	48	14
11	56	22	30	18	16	15	48	347	60	53	45	15
12	166	20	29	18	16	15	48	359	58	55	42	15
13	127	19	29	18	16	15	47	361	55	84	40	16
14	107	17	29	17	16	15	47	368	71	78	42	19
15	71	17	28	17	16	15	47	385	56	310	50	19
16	52	16	27	17	16	15	47	354	50	288	45	22
17	54	16	27	17	16	15	48	326	50	199	39	34
18	115	16	26	17	16	15	52	292	46	290	35	63
19	84	15	26	17	16	15	54	274	44	234	32	70
20	64	15	25	17	16	17	58	268	60	145	22	138
21	53	15	24	17	16	20	64	228	67	106	19	244
22	50	15	22	17	16	40	70	215	53	116	26	146
23	48	15	22	17	16	50	78	219	42	102	24	92
24	48	15	21	17	16	52	88	242	36	89	22	116
25	46	15	21	17	16	50	100	203	65	217	20	114
26	44	17	21	17	16	48	120	193	338	191	20	76
27	40	19	20	17	16	46	150	176	285	114	19	62
28	36	20	20	17	16	43	180	167	209	86	19	73
29	39	20	20	17	---	41	230	150	168	70	21	80
30	39	21	20	17	---	40	300	130	108	62	29	63
31	33	---	19	17	---	40	---	110	---	64	26	---
TOTAL	1780	653	790	543	453	781	2303	9701	2733	3853	1230	1651
MEAN	57.4	21.8	25.5	17.5	16.2	25.2	76.8	313	91.1	124	39.7	55.0
MAX	166	35	31	19	17	52	300	501	338	310	76	244
MIN	27	15	19	17	16	15	40	110	36	48	19	14
CFSM	1.20	.45	.53	.37	.34	.53	1.60	6.52	1.90	2.58	.83	1.15
IN.	1.38	.51	.61	.42	.35	.61	1.78	7.52	2.12	2.99	.95	1.28
AC-FT	3530	1300	1570	1080	899	1550	4570	19240	5420	7640	2440	3270

WTR YR 1979 TOTAL 26471 MEAN 72.5 MAX 501 MIN 14 CFSM 1.51 IN 20.51 AC-FT 52510

15294010 DECEPTION CREEK NEAR WILLOW--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1978 to September 1979.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1978, May to September 1979.

INSTRUMENTATION.--Temperature recorder since October 1, 1978.

REMARKS.--No record October 23 to May 6 and August 1-8, due to recorder malfunction. Records represent water temperature at sensor within 0.5°C.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 17.0°C July 3; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
OCT 05...	1750	40	125	6.8	--	4.5	12.1	K10	K8	K2	36	3
JUL 24...	0815	81	85	7.2	14.0	11.0	10.2	--	120	K13	26	0

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
OCT 05...	11	2.1	10	1.0	40	0	2.3	18	.1	11	80	76
JUL 24...	7.9	1.5	6.5	.7	32	0	5.1	7.2	.0	10	63	55

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)
OCT 05...	.05	.09	.00	.03	.27	.27	.27	.30	.32	.01	.01	80
JUL 24...	.05	.01	.03	--	.28	--	.31	--	.36	.01	.01	--

DATE	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)
OCT 05...	1	0	0	0	3	340	--	210	0	0	--
JUL 24...	1	0	1	0	13	380	190	190	15	20	0

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT 05...	10	.0	1	0	0	0	4.7	1.0	--	3	.32
JUL 24...	20	.1	--	0	0	30	--	--	.00	5	1.1

K NON-IDEAL COLONY COUNT

15294010 DECEPTION CREEK NEAR WILLOW--Continued

TEMPERATURE (DEG. C) OF WATER, OCTOBER 1978

DAY	MAX	MIN	DAY	MAX	MIN	DAY	MAX	MIN
1	4.5	4.0	9	5.0	5.0	16	2.5	1.5
2	5.0	4.5	10	5.0	4.0	17	3.0	2.5
3	5.0	4.0	11	4.5	4.0	18	3.5	3.0
4	4.0	3.5	12	4.0	3.5	19	3.5	3.5
5	4.5	4.0	13	3.5	3.5	20	3.5	2.0
6	5.0	4.0	14	3.5	3.0	21	2.0	2.0
7	5.0	4.5	15	3.0	1.5	22	2.0	1.5
8	5.0	5.0						

TEMPERATURE (DEG. C) OF WATER, MAY TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	10.5	9.5	15.0	10.5	---	---	10.5	8.0
2			---	---	10.5	9.5	16.0	11.0	---	---	10.0	7.5
3			---	---	10.0	8.0	17.0	12.0	---	---	9.5	8.0
4			---	---	11.0	9.5	16.0	13.0	---	---	10.0	7.0
5			---	---	12.0	9.5	14.0	12.5	---	---	10.0	7.0
6			---	---	12.0	10.5	12.5	12.0	---	---	9.5	7.0
7			3.0	1.5	10.5	9.5	13.5	11.0	---	---	9.5	7.0
8			2.0	1.0	11.0	9.5	14.0	11.5	---	---	10.0	7.5
9			2.5	1.5	12.0	9.0	14.5	11.5	14.0	12.0	10.0	7.0
10			3.0	1.5	12.0	10.0	15.5	11.5	13.0	12.0	10.5	9.0
11			3.5	2.0	11.5	10.0	16.0	13.5	13.0	11.5	10.0	8.0
12			3.5	2.0	11.5	9.0	15.5	13.0	14.0	12.0	9.5	8.0
13			4.5	2.0	11.5	9.5	13.5	12.0	13.0	11.5	9.5	8.5
14			5.0	2.0	11.0	8.5	13.5	12.0	13.0	12.0	10.0	9.0
15			6.0	3.0	11.0	9.0	12.0	11.5	12.0	11.5	10.0	9.0
16			5.5	3.0	10.0	9.5	12.0	11.5	12.0	11.0	9.5	8.0
17			5.0	3.0	10.0	9.5	14.0	11.0	13.0	11.0	9.5	9.0
18			5.5	3.5	11.5	9.0	12.5	11.5	12.5	11.0	9.5	9.0
19			6.0	4.0	11.5	10.0	14.0	12.0	12.5	11.0	9.5	8.5
20			6.0	3.5	10.5	10.0	15.0	11.5	12.5	11.0	9.5	9.0
21			7.0	4.0	13.0	9.5	14.0	12.5	12.5	9.5	9.0	8.5
22			7.0	5.0	14.5	10.0	12.5	11.5	12.5	9.5	9.0	8.0
23			7.0	5.5	14.5	11.0	12.5	12.0	13.5	10.0	9.0	8.0
24			7.5	5.5	13.5	11.0	12.5	11.0	13.5	10.0	8.5	8.0
25			9.0	5.5	11.5	10.5	12.0	11.5	13.0	10.0	8.5	7.0
26			9.5	6.5	10.5	10.0	12.5	10.5	13.0	10.0	7.5	6.5
27			10.5	7.0	10.0	9.0	13.0	10.5	12.5	10.0	7.0	7.0
28			11.5	8.0	10.0	9.0	13.5	10.0	12.5	10.5	7.5	7.0
29			11.0	8.5	11.5	9.5	13.0	10.5	11.5	10.0	7.5	5.5
30			10.5	8.5	13.5	9.5	13.0	11.0	11.0	8.5	6.5	5.0
31			10.5	8.0	---	---	12.5	11.0	11.0	9.0	---	---
MONTH			11.5	1.0	14.5	8.0	17.0	10.0	14.0	8.5	10.5	5.0
YEAR	17.0											

15294100 DESHKA RIVER NEAR WILLOW

LOCATION.--Lat 61°46'05", long 150°20'13, in SW¼NE¼ sec.3, T.19 N., R.6 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on left bank 0.2 mi (0.3 km) upstream from unnamed tributary, 1.1 mi (1.8 km) downstream from unnamed tributary, 7.9 mi (12.7 km) upstream from mouth, and 10 mi (16 km) west of Willow, Alaska.

DRAINAGE AREA.--592 mi^2 (1,530 km^2).

PERIOD OF RECORD.--October 1978 to September 1979.

GAGE.--Water-stage recorder. Altitude of gage is 80 ft (24 m), from topographic map.

REMARKS.--Records poor for period of no gage-height record prior to May 2, fair thereafter. Several observations of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,100 ft^3/s (201 m^3/s) May 7, gage height, 6.65 ft (2.027 m), from floodmarks; maximum gage height, 7.34 ft (2.237 m), Apr. 30, from floodmarks, backwater from ice; minimum discharge, 216 ft^3/s (6.12 m^3/s), Sept. 12, gage height 1.43 ft (0.436 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	500	490	380	290	270	260	270	4800	940	1360	401	367
2	520	480	380	300	270	260	270	5930	860	1020	380	360
3	560	470	380	300	270	260	270	6390	810	810	360	322
4	520	460	370	300	270	260	270	6510	780	682	354	303
5	500	460	360	300	270	260	280	6340	744	648	341	279
6	520	460	360	300	270	260	300	6370	717	690	328	255
7	500	450	360	300	270	260	290	6850	682	890	387	238
8	520	450	360	300	270	260	280	6610	648	800	565	233
9	500	450	350	300	270	260	280	6340	605	673	589	233
10	520	450	350	300	270	260	280	6390	573	597	581	228
11	500	450	350	300	270	260	280	6340	533	565	541	222
12	520	450	350	300	270	260	280	5520	502	495	488	222
13	580	440	340	300	270	260	280	5090	488	458	443	228
14	620	440	330	300	270	260	280	4940	488	450	443	244
15	650	420	330	300	270	260	280	4910	458	472	549	303
16	600	420	320	290	270	260	280	4670	450	656	744	354
17	570	410	320	290	260	260	300	4260	472	1120	920	380
18	690	410	310	290	260	260	330	4050	458	1300	1010	354
19	710	410	310	290	260	260	360	3820	458	1030	1110	360
20	660	400	310	290	260	260	420	3690	436	860	900	860
21	620	390	300	290	260	260	480	3500	450	708	762	1930
22	580	390	300	280	260	270	600	3170	525	656	753	2510
23	540	380	300	280	260	270	700	2790	465	630	622	1980
24	480	380	300	280	260	270	850	2550	401	605	533	1660
25	520	380	300	280	260	270	1100	2330	408	614	495	2160
26	570	380	300	280	260	270	1400	2030	940	673	429	1940
27	540	380	300	280	260	270	2000	1800	2630	762	415	1440
28	480	380	300	280	260	270	2800	1590	3310	597	394	1190
29	500	390	290	270	---	270	3400	1360	3210	525	367	1220
30	550	390	290	270	---	270	4000	1170	1850	458	374	1320
31	500	---	290	270	---	270	---	1020	---	415	367	---
TOTAL	17140	12710	10190	9000	7440	8160	23210	133130	26291	22219	16945	23695
MEAN	553	424	329	290	266	263	774	4295	876	717	547	790
MAX	710	490	380	300	270	270	4000	6850	3310	1360	1110	2510
MIN	480	380	290	270	260	260	270	1020	401	415	328	222
CFSM	.93	.72	.56	.49	.45	.44	1.31	7.26	1.48	1.21	.92	1.33
IN.	1.08	.80	.64	.57	.47	.51	1.46	8.37	1.65	1.40	1.06	1.49
AC-FT	34000	25210	20210	17850	14760	16190	46040	264100	52150	44070	33610	47000

WTR YR 1979 TOTAL 310130 MEAN 850 MAX 6850 MIN 222 CFSM 1.44 IN 19.49 AC-FT 615100

15294300 SKWENTNA RIVER NEAR SKWENTNA

LOCATION.--Lat 61°52'23", long 151°22'01", in NW¼ sec.31, T.21 N., R.11 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on right bank 2 mi (3 km) downstream from Shell Creek, 8 mi (13 km) southwest of Skwentna, and 13 mi (21 km) upstream from mouth.

DRAINAGE AREA.--2,250 mi² (5,830 km²), approximately.

PERIOD OF RECORD.--October 1959 to current year.

REVISED RECORDS.--WSP 1936: 1960.

GAGE.--Water-stage recorder. Altitude of gage is 200 ft (61 m), from topographic map.

REMARKS.--Records fair except those for Nov. 9 to May 9, which are poor. Summer flows augmented by glaciers that cover 16 percent of the basin.

AVERAGE DISCHARGE.--20 years, 6,385 ft³/s (180.8 m³/s), 38.54 in/yr (979 mm/yr), 4,626,000 acre-ft/yr (5.70 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 51,600 ft³/s (1,460 m³/s) June 9, 1977, gage height, 15.09 ft (4.599 m), from rating curve extended above 35,000 ft³/s (990 m³/s); minimum daily, about 600 ft³/s (17.0 m³/s) Mar. 1-31, 1964, Dec. 16, 1968 to Mar. 15, 1969, Mar. 9 to Apr. 26, 1971, and Mar. 5 to Apr. 5, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 37,000 ft³/s (1,050 m³/s) Aug. 17, gage height, 13.64 ft (4.157 m); minimum daily, about 960 ft³/s (27.2 m³/s) Mar. 24 to Apr. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3230	3210	1400	1300	1100	1000	960	4700	16200	12200	14600	6020
2	3070	3030	1500	1300	1100	1000	960	5100	18900	13300	15100	5900
3	2620	2320	1600	1200	1100	1000	960	5600	20200	15800	15400	5800
4	2990	2770	1700	1200	1100	1000	960	6500	17400	20000	15400	5620
5	3680	3130	1800	1200	1100	1000	960	8000	16600	21800	15100	5320
6	5080	3030	1800	1200	1100	1000	960	9500	16500	18800	13700	4980
7	6490	2540	1800	1200	1100	1000	980	11500	15600	17000	13400	5000
8	6940	1960	1800	1200	1100	1000	980	12000	14900	15700	13800	5180
9	9010	1700	1800	1200	1100	1000	1000	11000	14200	14400	14700	5320
10	7690	1500	1700	1200	1100	1000	1000	9190	16400	14400	22700	5480
11	5980	1400	1700	1200	1000	980	1000	8800	18400	14400	25400	5420
12	5420	1300	1700	1200	1000	980	1100	9130	17900	14800	21800	5720
13	5400	1100	1700	1200	1000	980	1100	10100	14900	14700	19000	6000
14	5220	1100	1700	1200	1000	980	1100	10800	12800	15200	16000	7600
15	4680	1100	1600	1200	1000	980	1200	10900	12400	16200	25500	11000
16	4780	1100	1600	1200	1000	980	1200	10800	13200	16000	31000	10400
17	5350	1000	1600	1200	1000	980	1200	10700	13300	16000	32100	8500
18	6910	1000	1600	1200	1000	980	1300	11600	12700	17200	22300	6790
19	6880	1000	1500	1100	1000	980	1300	12500	13400	18000	17000	7030
20	6460	1000	1500	1100	1000	980	1400	13500	13700	16600	15300	7960
21	5420	1000	1500	1100	1000	980	1500	11900	13500	16500	13800	8290
22	4220	1000	1500	1100	1000	980	1600	11500	14100	15200	12600	9340
23	3450	1000	1400	1100	1000	980	1800	12000	15500	14000	11700	12800
24	3940	1000	1400	1100	1000	960	2000	12800	17300	15200	11900	12500
25	4420	1000	1400	1100	1000	960	2300	12700	15800	18600	12400	10100
26	4420	1100	1400	1100	1000	960	2600	14400	16100	18300	12800	8020
27	4150	1100	1300	1100	1000	960	3000	17800	13900	15300	12800	8830
28	3690	1200	1300	1100	1000	960	3400	19700	11800	13800	11400	8530
29	3920	1300	1300	1100	---	960	3800	20400	10600	13800	9340	7540
30	3920	1400	1300	1100	---	960	4300	19800	11300	13500	7660	6460
31	3580	---	1300	1100	---	960	---	16600	---	14000	6700	---
TOTAL	153010	47390	48200	36100	29000	30420	47920	361520	449500	490700	502400	223450
MEAN	4936	1580	1555	1165	1036	981	1597	11660	14980	15830	16210	7448
MAX	9010	3210	1800	1300	1100	1000	4300	20400	20200	21800	32100	12800
MIN	2620	1000	1300	1100	1000	960	960	4700	10600	12200	6700	4980
CFSM	2.19	.70	.69	.52	.46	.44	.71	5.18	6.66	7.04	7.20	3.31
IN.	2.53	.78	.80	.60	.48	.50	.79	5.98	7.43	8.11	8.31	3.69
AC-FT	303500	94000	95600	71600	57520	60340	95050	717100	891600	973300	996500	443200

CAL YR 1978 TOTAL 2270940 MEAN 6222 MAX 25300 MIN 760 CFSM 2.77 IN 37.55 AC-FT 4504000
WTR YR 1979 TOTAL 2419610 MEAN 6629 MAX 32100 MIN 960 CFSM 2.95 IN 40.00 AC-FT 4799000

NOTE.--No gage-height record Nov. 17 to Mar. 28.

15294350 SUSITNA RIVER AT SUSITNA STATION

(National stream-quality accounting and pesticide network station)

LOCATION.--Lat 61°32'41", long 150°30'45", in SE¼SE¼ sec.22, T.17 N., R.7 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on left bank at Susitna Station, 1.5 mi (2.4 km) downstream from Yentna River, and 12.5 mi (20.1 km) upstream from Alexander Creek.

DRAINAGE AREA.--19,400 mi² (50,200 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 40 ft (12 m), from topographic map.

REMARKS.--Water-discharge records poor for period of no gage-height record prior to May 13, good thereafter.

AVERAGE DISCHARGE.--5 years, 48,150 ft³/s (1,364 m³/s), 33.70 in/yr (856 mm/yr), 34,880,000 acre-ft/yr (43.0 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 197,000 ft³/s (5,580 m³/s) June 16, 1977, gage height, 18.76 ft (5.718 m); minimum daily, about 5,200 ft³/s (147 m³/s) Feb. 21 to Mar. 5, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 185,000 ft³/s (5,240 m³/s) July 26, gage height, 18.20 ft (5.547 m); minimum daily, about 6,500 ft³/s (184 m³/s) Apr. 1-10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29000	28000	9500	9000	8500	7500	6500	18000	121000	110000	136000	70700
2	28000	26000	9500	9000	8500	7500	6500	20000	122000	110000	139000	65400
3	26000	22000	9500	9000	8500	7000	6500	25000	133000	114000	140000	63000
4	26000	20000	9500	9000	8500	7000	6500	30000	134000	122000	136000	61000
5	30000	20000	9500	9000	8500	7000	6500	35000	126000	136000	132000	58600
6	36000	20000	9500	9000	8000	7000	6500	45000	126000	152000	129000	55800
7	42000	22000	9500	9000	8000	7000	6500	55000	127000	160000	127000	52700
8	46000	22000	9500	9000	8000	7000	6500	60000	118000	152000	137000	51800
9	48000	20000	9500	9000	8000	7000	6500	70000	111000	139000	152000	52200
10	50000	18000	9500	9000	8000	7000	6500	75000	113000	134000	148000	53400
11	46000	16000	9500	9000	8000	7000	7000	80000	125000	131000	143000	54200
12	44000	16000	9500	9000	8000	7000	7000	85000	130000	130000	134000	53600
13	42000	14000	9500	9000	8000	7000	7000	85000	123000	133000	128000	53800
14	40000	14000	9500	9000	8000	7000	7000	87300	115000	134000	126000	56500
15	40000	14000	9500	9000	8000	7000	7500	88300	106000	137000	138000	64100
16	38000	12000	9500	9000	8000	7000	7500	88300	102000	149000	154000	81600
17	38000	12000	9500	9000	8000	7000	8000	89000	104000	160000	156000	85600
18	40000	12000	9500	9000	8000	7000	8000	89500	103000	153000	160000	75500
19	44000	12000	9500	9000	8000	7000	8500	90100	99000	153000	145000	75100
20	48000	10000	9000	9000	8000	7000	8500	91600	102000	157000	131000	95000
21	46000	10000	9000	8500	7500	7000	9000	91900	105000	150000	135000	114000
22	40000	10000	9000	8500	7500	7000	9500	91600	109000	147000	127000	118000
23	34000	10000	9000	8500	7500	7000	10000	91100	112000	141000	114000	106000
24	30000	10000	9000	8500	7500	7000	10000	93500	117000	142000	108000	109000
25	28000	10000	9000	8500	7500	7000	11000	98900	123000	152000	109000	116000
26	28000	10000	9000	8500	7500	7000	12000	102000	146000	174000	108000	95400
27	32000	10000	9000	8500	7500	7000	13000	112000	158000	175000	108000	80700
28	32000	10000	9000	8500	7500	7000	14000	129000	145000	157000	108000	73800
29	30000	10000	9000	8500	---	7000	15000	136000	127000	142000	98600	71300
30	30000	10000	9000	8500	---	7000	16000	136000	115000	136000	89600	66400
31	30000	---	9000	8500	---	7000	---	130000	---	134000	78900	---
TOTAL	1141000	450000	288500	273500	222500	218000	260500	2519100	3597000	4416000	3974500	2230200
MEAN	36810	15000	9306	8823	7946	7032	8683	81260	119900	142500	128200	74340
MAX	50000	28000	9500	9000	8500	7500	16000	136000	158000	175000	160000	118000
MIN	26000	10000	9000	8500	7500	7000	6500	18000	99000	110000	78900	51800
CFSM	1.90	.77	.48	.46	.41	.36	.45	4.19	6.18	7.35	6.61	3.83
IN.	2.19	.86	.55	.52	.43	.42	.50	4.83	6.90	8.47	7.62	4.28
AC-FT	2263000	892600	572200	542500	441300	432400	516700	4997000	7135000	8759000	7883000	4424000

CAL YR 1978 TOTAL 15412100 MEAN 42220 MAX 130000 MIN 6400 CFSM 2.18 IN 29.55 AC-FT 30570000
WTR YR 1979 TOTAL 19590800 MEAN 53670 MAX 175000 MIN 6500 CFSM 2.77 IN 37.57 AC-FT 38860000

15294350 SUSITNA RIVER AT SUSITNA STATION--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955, 1970, 1975 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: May 1975 to current year (seasonal).

INSTRUMENTATION.--Temperature recorder since May 23, 1975.

REMARKS.--No record Oct. 1 to May 14, when gage was shut down for the winter. Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by temperature cross-sections Oct. 2, Jan. 15, Apr. 5, May 14, June 19, July 26, Aug. 29, and Sept. 17. A maximum variation of 2.5°C was found within the cross-sections.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 16.5°C July 9, 1976 and July 3 and 4, 1979; minimum, 0.0°C on most days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 16.5°C July 3 and 4; minimum, 0.0°C on most days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
OCT							
02...	1401	1.0	155	7.6	4.0	12.8	98
02...	1402	180	155	7.6	3.9	12.8	98
02...	1403	380	158	7.8	3.8	12.8	98
02...	1404	580	160	7.6	3.8	12.8	98
02...	1405	830	167	7.6	3.7	12.8	98
02...	1406	1030	168	7.4	3.6	12.8	98
02...	1407	1248	160	--	3.8	12.8	98

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
15...	1231	150	196	6.7	.0	11.4	80
15...	1232	480	196	6.8	.0	11.5	81
15...	1233	942	201	7.0	.0	10.0	70

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
APR					
05...	1331	250	199	.2	11.0
05...	1332	900	212	.2	11.4
05...	1333	1000	218	.2	10.3

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SAMP- LING DEPTH (FT)	PER- CENT OF TOTAL DEPTH	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY									
14...	1530	150	19	80	95	7.6	5.5	12.7	100
14...	1531	150	4.9	20	--	--	5.5	--	--
14...	1532	250	14	80	95	7.6	5.5	12.7	100
14...	1533	250	3.5	20	--	--	5.5	--	--
14...	1534	450	10	80	90	7.6	6.0	12.5	99
14...	1535	450	2.5	20	--	--	6.0	--	--
14...	1536	700	9.4	80	90	7.6	6.5	12.2	98
14...	1537	700	2.4	20	--	--	6.5	--	--
14...	1538	950	7.0	80	95	7.7	6.6	12.0	97
14...	1539	950	1.8	20	--	--	6.6	--	--
14...	1540	.0	--	--	95	--	5.6	12.4	98

15294350 SUSITNA RIVER AT SUSITNA STATION--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SAMP- LING DEPTH (FT)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	STREAM VELOC- ITY, POINT (FPS)	PER- CENT OF TOTAL DEPTH	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
JUN								
19...	1331	50	--	15.0	5.30	--	112	--
19...	1332	50	3.0	15.0	5.40	20	--	--
19...	1333	50	9.1	15.0	--	60	--	--
19...	1334	50	12	15.0	5.20	80	--	--
19...	1335	50	.5	15.0	--	--	110	7.9
19...	1336	150	--	30.0	5.40	--	112	--
19...	1337	150	5.9	30.0	6.00	20	112	--
19...	1338	150	18	30.0	--	60	112	--
19...	1339	150	24	30.0	4.80	80	112	--
19...	1340	150	.5	30.0	--	--	110	8.0
19...	1341	200	--	27.0	5.60	--	112	--
19...	1342	200	5.5	27.0	6.70	20	--	--
19...	1343	200	16	27.0	--	60	--	--
19...	1344	200	22	27.0	4.60	80	--	--
19...	1345	200	.5	27.0	--	--	110	7.9
19...	1346	250	--	23.0	5.40	--	112	--
19...	1347	250	4.6	23.0	6.30	20	--	--
19...	1348	250	14	23.0	--	60	--	--
19...	1349	250	19	23.0	4.60	80	--	--
19...	1350	250	.5	23.0	--	--	110	7.8
19...	1351	350	--	17.0	5.70	--	115	--
19...	1352	350	3.4	17.0	7.00	20	115	--
19...	1353	350	10	17.0	--	60	113	--
19...	1354	350	14	17.0	4.60	80	--	--
19...	1355	350	.5	17.0	--	--	110	7.8
19...	1356	450	--	15.0	5.70	--	115	--
19...	1357	450	3.0	15.0	6.30	20	--	--
19...	1358	450	8.9	15.0	--	60	--	--
19...	1359	450	12	15.0	5.20	80	--	--
19...	1400	450	.5	15.0	--	--	115	7.7
19...	1401	600	--	15.0	5.00	--	120	--
19...	1402	600	3.0	15.0	6.50	20	--	--
19...	1403	600	8.9	15.0	--	60	--	--
19...	1404	600	12	15.0	3.80	80	--	--
19...	1405	600	.5	15.0	--	--	115	7.7
19...	1406	700	--	14.0	5.90	--	122	--
19...	1407	700	2.7	14.0	6.60	20	--	--
19...	1408	700	8.2	14.0	--	60	--	--
19...	1409	700	11	14.0	5.40	80	--	--
19...	1410	700	.5	14.0	--	--	115	--
19...	1411	850	--	15.0	4.70	--	124	--
19...	1412	850	3.1	15.0	5.90	20	126	--
19...	1413	850	9.2	15.0	--	60	126	--
19...	1414	850	12	15.0	3.80	80	--	--
19...	1415	850	.5	15.0	--	--	120	--
19...	1416	1000	--	14.0	3.90	--	127	--
19...	1417	1000	2.9	14.0	4.90	20	--	--
19...	1418	1000	8.6	14.0	--	60	--	--
19...	1419	1000	11	14.0	3.10	80	--	--
19...	1420	1000	.5	14.0	--	--	120	--

15294350 SUSITNA RIVER AT SUSITNA STATION--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	SEDI-MENT, SUS-PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
JUN								
19...	--	--	--	46	10	11000	327	70
19...	10.9	--	--	--	--	--	--	--
19...	10.9	--	--	--	--	--	--	--
19...	10.9	--	--	--	--	--	--	--
19...	--	11.0	99	--	--	--	--	--
19...	--	--	--	45	11	11000	365	58
19...	10.9	--	--	46	10	12000	362	68
19...	10.9	--	--	--	--	--	398	60
19...	10.9	--	--	45	10	11000	469	53
19...	--	11.0	99	--	--	--	--	--
19...	--	--	--	45	10	11000	602	39
19...	10.9	--	--	--	--	--	--	--
19...	10.9	--	--	--	--	--	--	--
19...	10.9	--	--	--	--	--	--	--
19...	--	11.0	99	--	--	--	--	--
19...	--	--	--	46	10	--	486	48
19...	11.0	--	--	--	--	--	--	--
19...	11.0	--	--	--	--	--	--	--
19...	11.0	--	--	--	--	--	--	--
19...	--	11.0	99	--	--	--	--	--
19...	--	--	--	47	11	13000	413	39
19...	10.9	--	--	46	11	11000	343	78
19...	10.9	--	--	46	11	12000	444	55
19...	10.9	--	--	--	--	--	--	--
19...	--	11.0	99	--	--	--	--	--
19...	--	--	--	47	12	11000	420	56
19...	10.8	--	--	--	--	--	--	--
19...	10.8	--	--	--	--	--	--	--
19...	10.8	--	--	--	--	--	--	--
19...	--	11.0	99	--	--	--	--	--
19...	--	--	--	49	14	9000	350	64
19...	10.3	--	--	--	--	--	--	--
19...	10.3	--	--	--	--	--	--	--
19...	10.3	--	--	--	--	--	--	--
19...	--	11.1	99	--	--	--	--	--
19...	--	--	--	49	15	8800	376	56
19...	10.1	--	--	--	--	--	--	--
19...	10.1	--	--	--	--	--	--	--
19...	10.1	--	--	--	--	--	--	--
19...	--	11.2	99	--	--	--	--	--
19...	--	--	--	50	15	8700	614	34
19...	9.9	--	--	51	15	8100	314	65
19...	10.0	--	--	--	--	--	411	50
19...	10.0	--	--	--	--	--	--	--
19...	--	11.2	99	--	--	--	--	--
19...	--	--	--	51	15	8600	451	45
19...	10.1	--	--	--	--	--	--	--
19...	10.1	--	--	--	--	--	--	--
19...	10.1	--	--	--	--	--	--	--
19...	--	11.2	99	--	--	--	--	--

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	SEDI-MENT, SUS-PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
JUL									
26...	1605	147	112	7.5	11.2	11.1	100	2030	59
26...	1610	247	115	7.6	11.2	11.1	100	1880	76
26...	1615	447	112	7.7	9.0	11.5	99	2150	81
26...	1620	697	115	7.8	8.4	11.7	99	2790	75
26...	1625	1097	120	7.6	8.5	11.7	99	2980	78

15294350 SUSITNA RIVER AT SUSITNA STATION--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	SEDIMENT, SUSPENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
AUG										
29...	1401	110	24.0	122	7.0	10.1	11.0	99	608	84
29...	1402	210	29.0	123	7.0	10.0	11.0	99	654	79
29...	1403	360	17.0	126	7.2	9.6	11.0	99	711	75
29...	1404	660	15.0	130	7.3	8.0	11.3	97	810	66
29...	1405	910	13.0	132	7.4	8.0	11.2	97	927	56

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SAMPLING DEPTH (FT)	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	STREAM VELOCITY, POINT (FPS)	PERCENT OF TOTAL DEPTH	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
SEP									
17...	1601	50	--	16.0	3.20	--	133	--	--
17...	1602	50	.3	16.0	--	--	135	7.2	8.2
17...	1606	150	--	30.0	5.00	--	132	--	--
17...	1607	150	.3	30.0	--	--	135	7.2	8.3
17...	1608	150	6.0	30.0	5.40	20	133	--	--
17...	1609	150	18	30.0	--	60	133	--	--
17...	1610	150	24	30.0	4.70	80	133	--	--
17...	1611	200	--	27.0	4.60	--	132	--	--
17...	1612	200	.3	27.0	--	--	135	7.3	8.2
17...	1616	250	--	26.0	5.20	--	132	--	--
17...	1617	250	.3	26.0	--	--	131	7.4	8.1
17...	1621	350	--	17.0	5.80	--	131	--	--
17...	1622	350	.3	17.0	--	--	31	7.4	8.1
17...	1623	350	3.4	17.0	6.50	20	131	--	--
17...	1624	350	10	17.0	--	60	131	--	--
17...	1625	350	13	17.0	5.10	80	131	--	--
17...	1626	450	--	14.0	5.90	--	124	--	--
17...	1627	450	.3	14.0	--	--	124	7.6	7.0
17...	1631	550	--	14.0	6.80	--	125	--	--
17...	1632	550	.3	14.0	--	--	124	7.7	7.0
17...	1636	650	--	14.0	4.90	--	124	--	--
17...	1637	650	.3	14.0	--	--	124	7.7	7.0
17...	1641	800	--	14.0	5.10	--	127	--	--
17...	1642	800	.3	14.0	--	--	127	7.6	7.1
17...	1643	800	2.8	14.0	6.20	20	128	--	--
17...	1644	800	8.4	14.0	--	60	128	--	--
17...	1645	800	11	14.0	4.00	80	127	--	--
17...	1646	950	--	12.0	2.90	--	129	--	--
17...	1647	950	.3	12.0	--	--	129	7.6	7.2

15294350 SUSITNA RIVER AT SUSITNA STATION--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	SEDI-MENT, SUS-PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
SEP								
17...	--	--	54	0	21	18000	543	75
17...	11.2	98	--	--	--	--	--	--
17...	--	--	53	0	21	15000	645	64
17...	11.2	99	--	--	--	--	--	--
17...	--	--	54	0	21	17000	594	68
17...	--	--	54	0	21	17000	616	66
17...	--	--	54	0	21	17000	675	61
17...	--	--	54	0	22	19000	768	55
17...	11.2	98	--	--	--	--	--	--
17...	--	--	55	0	21	18000	780	57
17...	11.2	98	--	--	--	--	--	--
17...	--	--	55	0	21	19000	737	61
17...	11.2	98	--	--	--	--	--	--
17...	--	--	55	0	20	17000	628	71
17...	--	--	55	0	20	19000	749	60
17...	--	--	55	0	21	16000	948	49
17...	--	--	56	0	21	20000	1380	42
17...	11.3	97	--	--	--	--	--	--
17...	--	--	57	0	20	21000	1030	55
17...	11.4	97	--	--	--	--	--	--
17...	--	--	56	0	20	19000	1120	53
17...	11.4	97	--	--	--	--	--	--
17...	--	--	57	0	22	19000	1190	48
17...	11.4	97	--	--	--	--	--	--
17...	--	--	58	0	21	18000	767	73
17...	--	--	57	0	21	19000	1040	52
17...	--	--	57	0	21	19000	1400	40
17...	--	--	58	0	21	18000	1030	60
17...	11.5	98	--	--	--	--	--	--

ATE	TIME	STREAM WIDTH (FT)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPF-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE, AIR (DEG C)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT												
02...	1400	1250	28200	--	--	--	--	755	--	--	--	--
DEC												
20...	1545	1195	8410	183	--	-32.0	--	--	--	<1	--	--
JAN												
15...	1230	960	9890	--	--	E-1.0	2.2	740	K3	<1	79	13
APR												
05...	1330	1100	6700	--	--	--	1.5	--	K11	K1	84	13
MAY												
14...	1630	1350	86800	92	7.6	E11.0	160	765	K15	<1	37	3
JUN												
19...	1330	1300	95200	119	--	--	170	760	K7	K1	49	10
JUL												
26...	1600	1897	186400	115	7.7	--	790	760	K91	K65	60	6
AUG												
29...	1400	1210	90700	--	--	--	260	--	K9	K14	53	9
SEP												
17...	1600	1170	87700	130	--	11.5	100	731	K28	K8	59	13

E ESTIMATED
K NON-IDEAL COLONY COUNT

15294350 SUSITNA RIVER AT SUSITNA STATION--Continued

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT 02...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 20...	--	--	--	--	73	0	--	--	--	--	--	--
JAN 15...	25	3.9	7.0	1.5	80	0	18	11	.2	9.8	130	116
APR 05...	27	4.0	7.6	1.6	86	0	15	14	.1	11	113	123
MAY 14...	12	1.7	3.0	1.0	41	0	3.7	3.4	.1	6.3	64	52
JUN 19...	16	2.3	2.6	1.4	48	--	17	2.9	.1	5.0	68	71
JUL 26...	20	2.4	3.0	1.7	66	0	9.2	1.5	.3	4.3	70	75
AUG 29...	17	2.5	2.5	1.5	53	0	16	2.3	.1	4.2	66	72
SEP 17...	19	2.7	2.6	1.5	56	0	17	2.3	.1	4.9	79	78

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)
OCT 02...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 20...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 15...	.21	--	.06	.16	.22	.12	.10	.43	--	.02	.05	2
APR 05...	.21	--	.04	.03	.07	.00	.11	.28	--	.01	.02	--
MAY 14...	.50	--	.01	.16	.17	.00	.21	.67	--	.01	.01	8
JUN 19...	.13	--	.04	1.2	1.2	.88	.32	1.3	--	.25	.00	10
JUL 26...	.09	--	.02	.45	.47	.46	.01	.56	--	.77	.01	--
AUG 29...	.07	--	.03	.40	.43	.31	.12	.50	--	.46	.00	--
SEP 17...	.08	.09	.01	.41	.42	.00	.42	.50	.51	.36	.01	11

DATE	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
OCT 02...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 20...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 15...	--	1	0	0	40	0	0	1	0	0	10	1
APR 05...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 14...	--	1	200	200	0	1	1	0	20	10	10	6
JUN 19...	--	2	200	200	0	1	0	1	30	20	10	7
JUL 26...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 29...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 17...	9	2	100	70	30	0	0	<1	40	30	10	8

15294350 SUSITNA RIVER AT SUSITNA STATION--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
OCT 02...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 20...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 15...	0	<3	3	1	2	490	400	90	11	7	4	40
APR 05...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 14...	6	0	25	21	4	14000	14000	170	60	60	0	10
JUN 19...	0	7	29	28	1	12000	12000	0	12	10	2	250
JUL 26...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 29...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 17...	5	<3	37	36	1	26000	--	40	16	14	2	580

DATE	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
OCT 02...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 20...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 15...	30	10	.1	.1	.0	1	0	1	1	1	0	10
APR 05...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 14...	0	10	.2	.2	.0	1	1	0	0	0	0	50
JUN 19...	240	10	.1	.1	.0	1	0	1	0	0	0	60
JUL 26...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 29...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 17...	580	4	.1	.1	.0	1	1	0	0	0	0	80

DATE	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	LENGTH OF EXPO-SURE (DAYS)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 02...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 20...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 15...	7	3	9.3	.2	--	--	--	--	--	3	80	--
APR 05...	--	--	--	--	80	.000	.000	.000	.000	4	72	--
MAY 14...	40	10	6.8	1.8	--	--	--	--	--	E683	--	E36
JUN 19...	50	10	.9	2.6	36	.000	.000	.000	.000	416	107000	54
JUL 26...	--	--	--	--	--	--	--	--	--	2370	1190000	74
AUG 29...	--	--	--	--	--	--	--	--	--	742	182000	72
SEP 17...	80	<3	.6	1.1	--	--	--	--	--	901	213000	55

E ESTIMATED

15294350 SUSITNA RIVER AT SUSITNA STATION--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL (UG/L)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)
JAN 15...	1230	ND	--	ND	--	ND	--	ND	--	ND	--
MAY 14...	1630	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SEP 17...	1600	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DI-AZINON, TOTAL (UG/L)	DI-AZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DI-ELDRIN TOTAL (UG/L)	DI-ELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
JAN 15...	ND	--	ND	--	ND	--	ND	--	ND	--
MAY 14...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SEP 17...	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALA-THION, TOTAL (UG/L)	MALA-THION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METH-OXY-CHLOR, TOTAL (UG/L)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)
JAN 15...	ND	--	ND	--	ND	--	ND	--	ND	--
MAY 14...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SEP 17...	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	METHYL PARA-THION, TOTAL (UG/L)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI-THION, TOTAL (UG/L)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA-THION, TOTAL (UG/L)	PARA-THION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOX-APHENE, TOTAL (UG/L)	TOXA-PHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TRI-THION, TOTAL IN BOTTOM MATERIAL (UG/KG)
JAN 15...	ND	--	ND	--	ND	--	ND	--	ND	--
MAY 14...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SEP 17...	ND	--	ND	--	ND	--	ND	--	ND	--

ND MATERIAL SPECIFICALLY ANALYZED FOR BUT NOT DETECTED

15294350 SUSITNA RIVER AT SUSITNA STATION--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO SEPTEMBER 1979

DATE	JAN 15,79		MAY 14,79		JUN 19,79		JUL 26,79		AUG 29,79		SEP 17,79	
TIME	1230		1630		1330		1600		1400		1600	
TOTAL CELLS/ML	10		13		0		0		0		110	
DIVERSITY: DIVISION	0.0		0.0		0.0		0.0		0.0		0.8	
.CLASS	0.0		0.0		0.0		0.0		0.0		0.8	
..ORDER	0.0		0.0		0.0		0.0		0.0		0.8	
...FAMILY	0.0		0.0		0.0		0.0		0.0		2.2	
....GENUS	0.0		0.0		0.0		0.0		0.0		2.5	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...OOCYSTACEAE												
....ANKISTRODESMUS	--	-	--	-	--	-	--	-	--	-	27#	25
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..PENNALES												
...DIATOMACEAE												
....DIATOMA	--	-	--	-	--	-	--	-	--	-	14	13
...FRAGILARIACEAE												
....HANNAEA	--	-	--	-	--	-	--	-	--	-	14	13
....SYNEDRA	--	-	--	-	--	-	--	-	--	-	27#	25
...NAVICULACEAE												
....NAVICULA	--	-	13#	100	--	-	--	-	--	-	14	13
...NITZSCHIACEAE												
....NITZSCHIA	10#	100	--	-	--	-	--	-	--	-	14	13

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

15294350 SUSITNA RIVER AT SUSITNA STATION--Continued

TEMPERATURE (DEG. C) OF WATER, MAY TO SEPTEMBER 1979

MAY 1979

DAY	MAX	MIN	MEAN	DAY	MAX	MIN	MEAN	DAY	MAX	MIN	MEAN
15	6.5	5.0	5.5	21	9.0	7.5	8.0	27	11.5	10.0	11.0
16	6.5	6.0	6.0	22	9.0	8.0	8.5	28	11.5	10.0	10.5
17	7.5	6.0	6.5	23	9.0	8.0	8.5	29	11.5	10.0	10.5
18	8.0	6.5	7.0	24	9.5	8.0	8.5	30	10.5	8.5	9.5
19	8.0	6.5	7.5	25	10.5	8.5	9.5	31	10.5	8.5	9.0
20	8.5	7.0	8.0	26	11.0	9.5	10.0				
								MONTH	11.5		

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	10.5	9.5	10.0	14.0	11.5	12.5	13.5	11.5	12.0	10.0	9.0	9.5
2	10.5	9.5	10.0	15.5	13.0	14.0	14.5	12.5	13.0	10.0	8.5	9.5
3	10.5	8.5	9.5	16.5	14.5	15.0	14.0	12.5	13.5	10.0	9.0	9.5
4	10.0	9.5	9.5	16.5	14.5	15.0	14.5	12.5	13.5	9.5	8.5	9.0
5	11.5	9.0	10.0	14.5	12.0	13.0	14.0	12.5	13.0	9.0	8.0	8.5
6	11.0	10.0	10.5	12.0	10.5	11.0	12.5	11.5	11.5	9.5	8.5	9.0
7	10.5	9.0	9.5	11.5	9.5	10.5	11.5	11.0	11.0	10.0	8.5	9.0
8	10.5	9.0	9.5	12.5	11.0	12.0	12.0	11.0	11.5	10.0	9.0	9.5
9	12.5	10.0	11.0	13.0	11.0	11.5	12.0	11.5	12.0	10.0	9.0	9.5
10	12.5	11.0	12.0	14.0	12.0	13.0	11.5	11.0	11.0	10.0	9.5	10.0
11	12.5	11.0	11.5	14.5	13.0	13.5	11.0	10.5	11.0	10.0	8.5	9.5
12	12.0	10.5	11.5	14.5	12.5	13.0	12.0	10.5	11.0	10.0	9.0	9.5
13	11.5	10.5	10.5	14.5	12.0	13.0	12.5	11.5	12.0	9.5	9.0	9.0
14	11.5	9.5	10.5	14.0	12.5	13.0	12.0	11.0	11.5	9.5	9.0	9.0
15	11.5	10.5	11.0	12.5	11.0	11.5	11.0	10.5	10.5	9.5	8.5	9.0
16	11.5	10.0	10.5	11.0	10.0	10.5	10.5	9.5	10.0	8.5	7.5	8.0
17	11.0	10.0	10.5	13.0	10.5	11.0	11.5	10.0	10.5	8.5	8.0	8.0
18	12.5	10.0	11.0	13.5	12.5	13.0	11.5	10.0	10.5	8.5	8.5	8.5
19	12.5	11.0	11.5	14.0	12.0	13.0	11.0	10.5	10.5	8.5	7.5	8.0
20	11.5	10.5	11.0	14.0	12.5	13.0	11.5	10.5	11.0	8.0	7.5	7.5
21	13.0	10.5	11.5	13.5	12.5	13.0	11.5	10.0	10.5	7.5	7.0	7.5
22	14.5	12.0	13.0	12.5	11.5	12.0	12.0	10.5	11.5	7.5	7.0	7.0
23	15.0	13.0	14.0	12.0	11.0	11.0	12.5	11.0	11.5	7.5	7.0	7.0
24	14.5	12.5	13.0	11.5	11.0	11.5	12.5	11.0	11.5	7.5	7.0	7.5
25	12.5	10.0	11.0	11.5	11.0	11.0	12.5	11.0	12.0	7.5	6.5	7.0
26	10.0	8.5	9.0	12.5	10.5	11.0	12.5	11.0	12.0	6.5	6.0	6.5
27	9.0	8.0	8.5	13.0	11.5	12.0	12.5	11.5	12.0	6.5	6.0	6.0
28	10.0	8.5	9.0	14.0	11.5	12.0	12.0	11.0	11.5	6.0	5.5	6.0
29	11.5	9.0	10.0	13.5	12.0	13.0	11.5	10.0	10.5	6.0	5.0	5.5
30	12.5	10.5	11.5	13.5	12.5	13.0	9.5	8.5	9.0	5.5	5.0	5.5
31	---	---	---	13.5	12.0	12.5	10.0	8.5	9.5	---	---	---
MONTH	15.0	8.0	10.5	16.5	9.5	12.5	14.5	8.5	11.5	10.0	5.0	8.0

15294450 CHUITNA RIVER NEAR TYONEK

LOCATION.--Lat 61°06'31", long 151°15'07", in NE¼NE¼ sec.29, T.12 N., R.11 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on left bank 2.1 mi (3.4 km) downstream from Lone Creek, 4.8 mi (7.7 km) northwest of Tyonek, and 6.1 mi (9.8 km) upstream from mouth.

DRAINAGE AREA.--131 mi² (339 km²).

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 160 ft (49 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, Nov. 7 to May 4, which are estimated and considered poor. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,700 ft³/s (190 m³/s) Sept. 21, 1977, gage height, 9.50 ft (2.896 m), from rating curve extended above 2,700 ft³/s (76 m³/s); maximum gage height, 10.97 ft (3.344 m) May 14, 1976, backwater from ice; minimum daily discharge, about 45 ft³/s (1.3 m³/s) Mar. 20, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,200 ft³/s (62 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 9	0800	2,280	64.6	7.18	2.188	Sept.21	0500	2,510	71.1	7.39	2.252
May 28	0200	2,480	70.2	7.37	2.246	Sept.24	0500	*3,840	109	*8.21	2.502
June 25	2030	2,690	76.2	7.52	2.292						

Minimum daily discharge, about 45 ft³/s (1.3 m³/s) Mar. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	265	140	90	85	48	74	1000	1530	374	198	145
2	132	234	150	90	87	64	75	1150	1290	353	183	135
3	130	177	150	90	99	72	76	1300	1220	317	159	130
4	132	265	160	85	70	78	78	1400	1140	325	148	123
5	628	281	170	85	65	72	82	1570	1010	325	140	116
6	819	234	170	85	56	64	86	1630	1030	293	150	112
7	522	231	180	85	64	58	88	1680	903	242	174	114
8	983	200	180	80	58	50	92	1680	687	224	238	114
9	1560	190	170	80	60	52	96	1570	690	210	228	110
10	576	170	170	80	65	60	100	1530	792	198	625	107
11	388	160	170	80	69	58	105	1430	734	192	420	107
12	341	150	170	80	70	54	110	1470	651	189	293	103
13	365	140	160	80	74	52	115	1590	541	207	238	107
14	281	140	160	80	81	52	120	1570	454	257	802	728
15	224	130	160	85	85	53	130	1470	426	748	689	1670
16	231	130	150	80	83	52	140	1340	631	1190	1530	602
17	393	120	150	80	74	51	155	1230	556	627	883	337
18	872	120	150	78	65	49	170	1360	433	357	485	665
19	582	110	140	64	58	50	185	1440	438	293	406	1400
20	600	110	140	74	57	45	205	1360	551	238	435	1490
21	470	120	130	93	58	61	230	1240	435	207	337	1450
22	309	120	130	101	54	85	280	1130	406	198	277	1410
23	253	120	120	105	54	138	320	1350	410	189	231	1740
24	297	120	120	99	58	165	380	1470	451	695	210	2370
25	374	120	110	91	65	123	450	1510	1550	788	198	884
26	349	130	100	93	64	103	520	1750	1370	460	186	685
27	293	130	100	101	57	105	580	2010	685	301	177	928
28	261	130	100	87	53	109	680	1980	698	242	165	1450
29	265	130	95	91	---	93	750	1920	572	207	153	745
30	301	130	95	89	---	78	900	1660	435	195	153	546
31	277	---	95	87	---	74	---	1350	---	198	153	---
TOTAL	13343	4807	4385	2668	1888	2268	7372	46140	22719	10839	10664	20623
MEAN	430	160	141	86.1	67.4	73.2	246	1488	757	350	344	687
MAX	1560	281	180	105	99	165	900	2010	1550	1190	1530	2370
MIN	130	110	95	64	53	45	74	1000	406	189	140	103
CFSM	3.29	1.22	1.08	.66	.52	.56	1.88	11.4	5.78	2.67	2.63	5.24
IN.	3.79	1.37	1.25	.76	.54	.64	2.09	13.10	6.45	3.08	3.03	5.86
AC-FT	26470	9530	8700	5290	3740	4500	14620	91520	45060	21500	21150	40910

CAL YR 1978 TOTAL 95779 MEAN 262 MAX 1790 MIN 60 CFSM 2.00 IN 27.20 AC-FT 190000
WTR YR 1979 TOTAL 147716 MEAN 405 MAX 2370 MIN 45 CFSM 3.09 IN 41.95 AC-FT 293000

15295600 TERROR RIVER NEAR KODIAK

LOCATION.--Lat 57°39'10", long 153°01'30", in NE¼ sec.19, T.29 S., R.23 W., Kodiak Island Borough, Hydrologic Unit 19050001, on Kodiak Island, in Kodiak National Wildlife Refuge, on right bank at outlet of Terror Lake 8 mi (13 km) upstream from Terror Bay and 25 mi (40 km) southwest of Kodiak.

DRAINAGE AREA.--15.0 mi² (38.8 km²).

PERIOD OF RECORD.--June 1962 to September 1968, July 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,230 ft (375 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, Nov. 25 to Mar. 26, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--7 years (water years 1963-68, 1979), 134 ft³/s (3.795 m³/s), 121.31 in/yr (3,081 mm/yr), 97,080 acre-ft/yr (120 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,590 ft³/s (130 m³/s) Aug. 29, 1963, gage height, 5.92 ft (1.804 m), from rating curve extended above 700 ft³/s (19.8 m³/s) on basis of velocity-area study; minimum daily, 8.0 ft³/s (0.23 m³/s) Mar. 13-24, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,930 ft³/s (54.7 m³/s) Oct. 17, gage height, 3.73 ft (1.137 m), only peak above base of 1,000 ft³/s (28.3 m³/s); minimum daily, about 10 ft³/s (0.28 m³/s) Feb. 23-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	69	22	35	25	12	18	189	744	365	180	81
2	42	63	20	35	22	13	18	224	587	574	155	80
3	40	53	18	40	20	13	18	170	574	760	141	77
4	125	52	20	50	16	14	21	137	580	671	139	70
5	236	53	30	50	16	15	26	130	416	514	141	66
6	200	50	27	45	14	17	31	137	310	422	153	60
7	150	43	22	40	14	17	31	134	292	400	139	54
8	141	42	20	40	13	18	27	123	365	335	161	50
9	137	39	19	45	13	20	24	114	335	310	375	48
10	139	39	18	45	12	20	23	104	400	335	664	49
11	123	36	17	45	12	19	21	101	538	350	544	183
12	101	34	16	45	12	19	20	114	568	335	365	484
13	98	34	15	40	11	20	18	119	478	292	454	526
14	86	32	15	40	11	22	18	123	496	232	385	345
15	78	31	14	35	11	22	18	128	514	232	526	224
16	616	28	14	30	11	20	17	161	484	236	478	292
17	1270	26	14	25	12	20	16	196	400	232	310	400
18	456	24	14	25	12	18	17	210	355	287	232	252
19	228	24	14	30	12	18	17	186	355	274	438	180
20	153	22	14	30	12	17	17	186	395	228	325	148
21	118	22	14	28	12	17	18	196	395	220	213	125
22	95	20	14	28	11	16	18	228	345	228	158	296
23	112	20	14	30	10	16	22	220	330	256	139	292
24	180	24	13	30	10	16	30	189	350	574	128	186
25	134	28	13	28	10	16	54	203	410	444	119	366
26	111	40	14	28	10	17	80	220	360	300	116	478
27	93	30	16	28	11	17	87	260	269	217	116	278
28	80	24	20	26	12	18	95	350	220	183	118	180
29	87	20	30	26	---	19	99	390	200	167	106	192
30	86	25	35	26	---	19	108	390	232	158	98	945
31	76	---	40	25	---	18	---	496	---	167	89	---
TOTAL	5633	1047	586	1073	367	543	1027	6128	12297	10298	7705	7007
MEAN	182	34.9	18.9	34.6	13.1	17.5	34.2	198	410	332	249	234
MAX	1270	69	40	50	25	22	108	496	744	760	664	945
MIN	40	20	13	25	10	12	16	101	200	158	89	48
CFSM	12.1	2.33	1.26	2.31	.87	1.17	2.28	13.2	27.3	22.1	16.6	15.6
IN.	13.97	2.60	1.45	2.66	.91	1.35	2.55	15.20	30.49	25.54	19.11	17.38
AC-FT	11170	2080	1160	2130	728	1080	2040	12150	24390	20430	15280	13900

WTR YR 1979 TOTAL 53711 MEAN 147 MAX 1270 MIN 10 CFSM 9.80 IN 133.19 AC-FT 106500

15296545 EAST FORK UPPER THUMB RIVER NEAR LARSEN BAY

LOCATION.--Lat 57°19'51", long 153°55'22", in NW¼SE¼ sec.8, T.33 S., R.29 W., Kodiak Island Borough, Hydrologic Unit 19050001, on Kodiak Island, on right bank about 500 ft (150 m) upstream from fish research camp 2.5 mi (4.0 km) upstream from confluence with North Fork and 15 mi (24 km) south of Larsen Bay.

DRAINAGE AREA.--8.99 mi² (23.2 km²).

PERIOD OF RECORD.--Water year 1979.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: May to September 1979.

INSTRUMENTATION.--Temperature recorder since May 17, 1979.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Temperature at sensor was compared with temperature cross-section on June 26. No variation was found.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 12.5°C Aug. 3; minimum, 2.5°C May 17, 18, 23-26, and June 4.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	TEMPERATURE (DEG C)
JUN				
26...	1500	30	--	--
26...	1501	--	4.0	6.6
26...	1502	--	7.0	6.5
26...	1503	--	10	6.6
26...	1504	--	13	6.6
26...	1505	--	16	6.5
26...	1506	--	19	6.5
26...	1507	--	22	6.6
26...	1508	--	25	6.6
26...	1509	--	28	6.6

TEMPERATURE (DEG. C) OF WATER, MAY TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	4.5	3.5	10.0	5.5	12.0	8.0	10.5	6.5
2			---	---	5.0	3.5	11.5	6.0	12.0	6.5	10.0	6.0
3			---	---	6.0	3.5	11.5	6.0	12.5	6.5	10.0	6.0
4			---	---	7.5	2.5	8.5	6.5	10.0	6.5	10.0	5.5
5			---	---	6.5	3.0	8.5	5.5	10.5	8.0	9.0	5.5
6			---	---	8.0	3.5	8.5	6.0	9.5	8.0	10.0	5.0
7			---	---	6.0	3.0	11.0	5.5	10.0	7.5	9.5	6.0
8			---	---	6.0	3.0	7.5	5.0	10.5	7.5	9.5	5.0
9			---	---	9.0	3.0	8.0	6.0	11.0	8.5	9.5	5.0
10			---	---	7.5	4.0	10.5	6.0	10.5	8.0	8.5	5.5
11			---	---	6.5	4.0	9.5	6.0	12.0	8.0	9.5	7.5
12			---	---	8.0	4.0	8.0	7.0	9.0	8.0	10.5	9.0
13			---	---	6.5	4.5	9.0	6.5	9.0	8.0	9.5	8.5
14			---	---	8.5	4.5	10.0	6.5	9.5	8.0	10.0	8.0
15			---	---	6.5	4.5	9.0	6.5	9.5	8.0	8.5	8.0
16			---	---	5.5	4.5	9.0	7.0	9.0	8.0	9.5	7.5
17			---	2.5	6.5	4.0	11.5	6.0	10.5	8.0	10.5	7.5
18			6.0	2.5	8.5	4.5	11.5	7.0	11.0	8.0	8.5	7.5
19			7.0	3.0	6.5	5.0	11.0	7.5	10.5	8.5	9.0	7.5
20			5.0	3.0	6.0	4.0	12.0	7.5	10.5	8.5	8.5	7.5
21			5.5	3.0	6.5	4.0	10.5	7.5	12.0	6.5	8.0	6.5
22			5.5	3.0	8.0	4.0	8.5	7.5	11.5	7.0	8.5	7.5
23			6.0	2.5	9.5	5.0	10.0	7.5	12.0	7.5	8.0	7.0
24			5.5	2.5	7.5	5.5	9.5	8.0	12.0	7.5	7.5	5.5
25			6.5	2.5	6.0	4.5	10.5	7.5	12.0	8.5	7.5	6.5
26			9.0	2.5	7.0	4.5	9.5	6.5	12.0	7.5	7.5	6.5
27			8.5	3.0	6.5	4.5	10.0	7.5	11.5	8.5	7.0	6.0
28			8.0	3.5	9.0	4.5	11.0	6.5	10.0	8.0	6.5	4.5
29			6.0	3.5	7.0	4.0	9.5	7.5	9.0	8.0	6.5	4.5
30			5.0	4.0	7.0	5.5	9.5	7.5	8.5	7.5	7.0	6.5
31			6.0	3.5	---	---	12.0	7.0	8.5	7.0	---	---
MONTH					9.5	2.5	12.0	5.0	12.5	6.5	10.5	4.5

15296550 UPPER THUMB RIVER NEAR LARSEN BAY

LOCATION.--Lat 57°21'03", long 153°58'04", in NE¼NE¼ sec.1, T.33 S., R.30 W., Kodiak Island Borough, Hydrologic Unit 19050001, Kodiak National Wildlife Refuge, on Kodiak Island, on right bank 0.2 mi (0.3 km) downstream from confluence of East and North Forks, 0.3 mi (0.5 km) upstream from mouth at Thumb Lake, and 13 mi (21 km) south of Larsen Bay.

DRAINAGE AREA.--18.8 mi² (48.7 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 380 ft (116 m), from topographic map.

REMARKS.--Water-discharge records poor for period of no gage-height record prior to May 18, fair thereafter.

AVERAGE DISCHARGE.--5 years, 95.2 ft^3/s (2.696 m^3/s), 68.76 in/yr (1,746 mm/yr), 68,970 acre-ft/yr (85.0 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,190 ft^3/s (33.7 m^3/s) June 16, 1977, gage height, 3.24 ft (0.988 m), from rating curve extended above 230 ft^3/s (6.5 m^3/s); minimum, 8.1 ft^3/s (0.23 m^3/s) Mar. 19 and Apr. 3, 1975, gage height, 0.53 ft (0.162 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 505 ft^3/s (14.3 m^3/s) June 1, gage height, 2.35 ft (0.716 m), from rating curve extended above 230 ft^3/s (6.5 m^3/s); minimum daily, 12 ft^3/s (0.34 m^3/s) Feb. 18-25.

Peak discharges above base of 500 ft^3/s (14 m^3/s) for the period of record were computed and are shown below. Annual maximums (*) are also shown.

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Sept.25, 1974	0500	720	20.4	2.49	0.759
June 22, 1975	2400	505	14.3	2.35	0.716
June 29, 1975	0100	*950	25.6	*2.85	0.869
Oct. 23, 1975	0100	668	18.9	2.56	0.780
June 5, 1976	2100	644	18.2	2.53	0.771
Sept.18, 1976	0630	*1,000	28.3	*2.90	0.884
Oct. 17, 1976	0600	644	18.2	2.53	0.771
Jan. 4, 1977	1200	519	14.7	2.36	0.719
May 18, 1977	0300	519	14.7	2.36	0.719
June 11, 1977	0600	660	18.7	2.65	0.808
June 16, 1977	2330	*1,190	33.7	*3.24	0.988
Oct. 9, 1977	0800	636	18.0	2.68	0.817
May 23, 1978	2230	620	17.6	2.37	0.722
June 14, 1978	1530	830	23.5	2.59	0.789
June 19, 1978	0430	*1,060a	30.0	*2.81a	0.856
Sept.14, 1978	Unknown	Unknown		Unknown	
June 1, 1979	0400	*505	14.3	*2.35	0.716

a Revised.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	95	120	75	32	13	120	150	428	100	37	24
2	24	85	120	90	30	15	100	150	325	108	36	22
3	22	80	100	150	28	14	110	140	265	122	34	22
4	26	90	150	100	26	13	120	150	236	122	33	21
5	36	95	220	120	22	13	140	160	201	106	32	20
6	50	80	190	90	20	14	150	160	169	92	30	20
7	80	70	160	70	19	17	150	160	177	96	29	20
8	130	65	140	60	18	20	140	150	162	108	29	19
9	200	60	120	80	17	16	140	140	156	104	28	18
10	200	80	120	100	16	17	130	125	197	96	28	18
11	150	75	150	80	15	20	120	120	236	88	26	17
12	130	70	130	70	15	24	120	115	236	88	28	17
13	180	60	110	65	14	30	110	115	218	83	29	16
14	140	55	90	65	14	26	105	120	214	72	29	16
15	240	50	80	75	13	22	100	130	236	69	35	16
16	340	48	70	66	13	20	110	120	205	64	36	16
17	300	46	65	62	13	24	110	120	159	60	34	16
18	260	42	60	60	12	30	120	120	141	60	31	17
19	240	40	55	60	12	40	120	132	132	63	54	20
20	220	40	60	70	12	70	125	135	130	56	44	21
21	200	44	65	60	12	60	130	132	120	52	40	21
22	220	50	55	54	12	80	140	141	110	49	36	45
23	240	60	50	50	12	100	150	132	110	50	34	77
24	200	80	40	46	12	90	150	130	112	66	30	62
25	190	120	35	44	12	80	140	150	122	58	29	219
26	150	200	30	42	13	75	130	173	106	49	28	144
27	130	140	40	40	14	70	120	218	96	48	26	92
28	110	100	80	38	14	69	130	280	88	43	25	72
29	100	90	70	36	---	70	140	310	83	42	25	70
30	120	110	120	34	---	70	160	305	96	38	24	228
31	110	---	90	32	---	80	---	356	---	34	25	---
TOTAL	4763	2320	2985	2084	462	1301	3830	5039	5266	2286	984	1406
MEAN	154	77.3	96.3	67.2	16.5	42.0	128	163	176	73.7	31.7	46.9
MAX	340	200	220	150	32	100	160	356	428	122	54	228
MIN	22	40	30	32	12	13	100	115	83	34	24	16
CFSM	8.19	4.11	5.12	3.57	.88	2.23	6.81	8.67	9.36	3.92	1.69	2.50
IN.	9.42	4.59	5.91	4.12	.91	2.57	7.58	9.97	10.42	4.52	1.95	2.78
AC-FT	9450	4600	5920	4130	916	2580	7600	9990	10450	4530	1950	2790

CAL YR 1978 TOTAL 43100 MEAN 118 MAX 970 MIN 12 CFSM 6.28 IN 85.28 AC-FT 85490
WTR YR 1979 TOTAL 32726 MEAN 89.7 MAX 428 MIN 12 CFSM 4.77 IN 64.75 AC-FT 64910

15296550 UPPER THUMB RIVER NEAR LARSEN BAY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: July 1974 to July 1978 and May to September 1979.

INSTRUMENTATION.--Temperature recorder July 27, 1974 to July 25, 1978 and May 18 to Sept. 30, 1979.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by temperature cross-section on June 27 and Aug. 7. No variation was found within the cross section.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 14.0°C Aug. 16, 1974; minimum 0.0°C Feb. 22-25, 1978.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 13.0°C Aug. 2; minimum observed, 1.0°C Jan. 23, but probably was less during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)
JUN					
27...	1730	47	--	96	--
27...	1731	--	4.0	--	7.4
27...	1732	--	10	--	7.3
27...	1733	--	15	--	7.3
27...	1734	--	20	--	7.3
27...	1735	--	25	--	7.3
27...	1736	--	30	--	7.3
27...	1737	--	35	--	7.3
27...	1738	--	40	--	7.3
27...	1739	--	44	--	7.3
AUG					
07...	1300	32	--	28	--
07...	1302	--	2.0	--	10.0
07...	1305	--	17	--	10.0
07...	1307	--	27	--	10.0

TEMPERATURE (DEG. C) OF WATER, MAY TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	5.0	4.0	10.5	6.0	12.5	8.5	10.5	7.0
2			---	---	5.5	4.0	11.5	6.5	13.0	7.5	10.0	6.5
3			---	---	6.0	4.0	11.0	6.5	12.5	7.5	10.0	6.5
4			---	---	8.0	4.0	8.5	7.0	10.5	7.0	10.0	6.5
5			---	---	7.0	3.5	8.0	5.5	11.0	8.5	9.0	6.5
6			---	---	8.0	3.5	7.5	6.0	9.5	8.5	10.0	6.0
7			---	---	6.0	4.0	10.5	5.5	10.5	8.0	10.0	6.5
8			---	---	6.5	3.5	7.0	5.5	10.0	7.5	10.0	6.0
9			---	---	9.5	4.0	8.0	6.5	10.5	8.5	10.0	6.0
10			---	---	8.0	5.0	11.0	6.0	10.0	8.5	8.5	6.5
11			---	---	7.5	5.0	10.0	6.0	11.5	8.0	9.0	8.0
12			---	---	8.0	4.5	8.0	7.0	9.5	8.0	10.0	8.0
13			---	---	7.0	5.0	8.5	6.5	9.0	8.5	9.0	8.5
14			---	---	9.0	5.0	9.0	6.5	9.5	8.0	10.0	8.0
15			---	---	7.0	5.5	8.0	6.5	9.0	8.5	8.5	8.0
16			---	---	6.0	5.0	8.0	7.0	9.0	8.0	9.0	7.5
17			---	---	6.5	5.0	10.0	6.5	10.5	8.0	10.5	7.5
18			---	---	8.5	4.5	11.5	7.0	10.5	8.0	9.0	7.5
19			7.5	5.0	7.0	6.0	11.0	8.0	10.0	9.0	9.0	7.5
20			5.5	4.0	6.0	5.0	12.5	7.5	10.0	8.0	9.0	7.5
21			7.0	4.0	6.5	4.5	11.0	8.0	11.0	7.0	8.0	7.0
22			6.0	4.0	8.0	4.5	9.0	8.0	11.0	7.0	8.5	7.5
23			7.0	4.0	10.0	5.0	10.5	8.0	12.0	7.5	8.0	7.5
24			6.5	3.5	7.0	6.0	9.5	8.5	12.0	7.5	7.5	6.0
25			7.5	4.5	7.0	5.5	10.5	8.0	12.5	8.5	7.0	6.5
26			9.5	3.0	7.5	5.0	9.5	7.0	11.5	7.5	7.5	6.0
27			9.5	3.5	7.5	5.0	11.0	8.0	11.0	8.5	7.0	6.5
28			8.5	4.0	9.0	5.0	12.5	7.0	10.0	8.5	6.5	5.0
29			6.5	4.5	7.0	4.5	10.5	8.0	9.0	8.0	6.5	5.0
30			5.5	4.5	7.0	5.5	9.5	8.0	8.5	8.0	7.0	6.5
31			6.5	4.5	---	---	12.5	7.5	9.0	7.5	---	---
MONTH			9.5		10.0	3.5	12.5	5.5	13.0	7.0	10.5	5.0
YEAR	13.0											

15296554 THUMB RIVER NEAR LARSEN BAY

LOCATION.--Lat 57°21'26", long 153°59'41", in NW¼SE¼ sec.31, T.32 S., R.29 W., Kodiak Island Borough, Hydrologic Unit 19050001, on Kodiak Island, on right bank 600 ft (180 m) upstream from mouth, 0.2 mi (0.3 km) downstream from Salmon Creek, and 12.5 mi (20.1 km) south of Larsen Bay.

DRAINAGE AREA.--25.3 mi^2 (65.5 km^2).

PERIOD OF RECORD.--Water year 1979.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June to September 1979.

INSTRUMENTATION.--Temperature recorder since June 29, 1979.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Temperature at sensor was compared with temperature cross-sections on June 27, Aug. 6, and Sept. 19. Maximum variation was found on Aug. 6 at left bank where temperature was 2.5°C colder than at sensor. Water temperature is influenced by colder water from Salmon Creek, a left bank tributary 300 ft (90 m) downstream from Thumb Lake. Discharge measurements made during the year are listed with low-flow partial-records stations.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 25.0°C Aug. 25; minimum, 9.0°C June 29 and Sept. 18.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	STREAMFLOW, INSTANTANEOUS (CFS)	TEMPERATURE (DEG C)
JUN					
27...	1600	62	--	118	--
27...	1601	--	2.0	--	7.9
27...	1602	--	7.0	--	8.2
27...	1603	--	12	--	8.4
27...	1604	--	17	--	8.6
27...	1605	--	22	--	8.8
27...	1606	--	27	--	9.1
27...	1607	--	32	--	9.3
27...	1608	--	37	--	9.4
27...	1609	--	42	--	9.5
27...	1610	--	47	--	9.5
27...	1611	--	52	--	9.5
27...	1612	--	58	--	9.5
AUG					
06...	2001	--	4.0	31	13.2
06...	2002	--	9.0	--	13.7
06...	2003	--	14	--	14.3
06...	2004	--	19	--	15.0
06...	2005	--	24	--	15.4
06...	2006	--	29	--	15.5
06...	2007	--	34	--	15.7
06...	2008	--	39	--	15.5
SEP					
19...	1540	45	--	24	--
19...	1541	--	5.0	--	11.8
19...	1542	--	10	--	11.9
19...	1543	--	15	--	12.2
19...	1544	--	20	--	12.7
19...	1545	--	25	--	13.0
19...	1546	--	30	--	13.3
19...	1547	--	35	--	13.3
19...	1548	--	40	--	13.4

15296554 THUMB RIVER NEAR LARSEN BAY--Continued

TEMPERATURE (DEG. C) OF WATER, JUNE TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1					---	---	12.0	10.0	---	---	20.5	16.5
2					---	---	13.5	10.5	---	---	20.5	16.5
3					---	---	14.0	11.5	---	---	21.0	16.5
4					---	---	13.5	12.0	---	---	20.5	16.0
5					---	---	13.5	12.0	---	---	19.5	16.0
6					---	---	12.5	10.0	---	---	21.0	15.5
7					---	---	14.0	10.0	17.0	14.5	21.0	17.5
8					---	---	13.0	11.0	17.5	15.0	22.5	17.5
9					---	---	12.0	11.0	17.5	15.0	21.5	17.0
10					---	---	14.0	10.5	17.0	15.0	19.5	17.0
11					---	---	13.5	11.0	19.5	16.0	20.0	18.0
12					---	---	13.0	11.5	17.0	16.5	21.0	18.0
13					---	---	13.5	11.5	18.0	16.5	19.5	18.0
14					---	---	14.5	12.0	18.5	16.5	21.0	18.5
15					---	---	14.0	12.5	18.5	17.0	19.5	18.5
16					---	---	13.5	12.0	18.5	17.5	20.5	12.0
17					---	---	15.0	11.5	22.0	17.5	13.0	10.0
18					---	---	16.5	12.5	21.0	18.0	10.0	9.0
19					---	---	16.0	14.0	20.0	19.0	---	---
20					---	---	17.5	14.0	21.5	19.0	---	---
21					---	---	16.5	14.5	22.0	18.0	---	---
22					---	---	15.5	14.0	22.5	18.5	---	---
23					---	---	15.5	14.0	24.0	19.5	---	---
24					---	---	15.0	12.0	24.0	19.5	---	---
25					---	---	14.5	12.0	25.0	21.5	---	---
26					---	---	14.5	12.0	24.5	20.0	---	---
27					---	---	16.0	13.0	24.0	21.5	---	---
28					---	---	17.0	12.5	22.0	19.5	---	---
29					11.0	9.0	---	---	19.5	18.0	---	---
30					10.5	10.0	---	---	19.0	18.0	---	---
31					---	---	---	---	19.0	17.0	---	---
MONTH							17.5	10.0	25.0	14.5	22.5	9.0

15296600 KARLUK RIVER AT OUTLET NEAR LARSEN BAY

LOCATION.--Lat 57°26'37", long 154°06'41", in NW¼SW¼ sec.33, T.31 S., R.30 W., Kodiak Island Borough, Hydrologic Unit 19050001, Kodiak National Wildlife Refuge, Kodiak Island, on right bank 0.3 mi (0.5 km) downstream from Karluk Lake and 5.0 mi (8.0 km) south of Larsen Bay.

DRAINAGE AREA.--100 mi^2 (259 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1975 to September 1976, October 1978 to September 1979.

GAGE.--Water-stage recorder. Altitude of gage is 360 ft (110 m) from topographic map.

REMARKS.--Water-discharge record poor prior to November 17, good thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 1,300 ft^3/s (36.8 m^3/s) Dec. 9, 1978, gage height, 2.09 ft (0.637 m), affected by seiche; minimum, 84 ft^3/s (2.38 m^3/s) Sept. 16, 1979, gage height, 0.78 ft (0.238 m), affected by seiche.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,300 ft^3/s (36.8 m^3/s) Dec. 9, gage height, 2.09 ft (0.637 m), affected by seiche; minimum, 84 ft^3/s (2.38 m^3/s) Sept. 16, gage height, 0.78 ft (0.238 m), affected by seiche.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	360	620	730	540	326	148	319	456	643	465	234	140
2	360	600	730	520	326	148	333	483	687	447	228	140
3	360	600	700	530	326	148	348	492	698	447	222	132
4	380	580	730	520	326	144	388	501	720	447	210	128
5	400	580	770	510	319	148	420	501	709	438	205	120
6	420	560	952	520	312	148	447	501	709	420	195	120
7	440	560	1090	520	291	148	465	492	698	396	185	117
8	440	540	1190	510	284	148	456	483	676	388	185	111
9	420	540	1250	510	277	156	456	474	665	380	175	108
10	420	520	1190	550	270	156	447	465	643	372	175	108
11	420	500	1120	540	270	152	447	456	632	364	170	102
12	400	480	1060	530	264	144	438	447	643	364	170	96
13	400	480	980	530	258	152	429	438	654	372	165	96
14	420	460	924	530	246	160	412	429	654	372	170	99
15	420	450	854	560	234	160	396	429	676	356	170	99
16	440	440	792	560	228	156	380	438	698	348	175	90
17	440	416	804	520	222	156	380	447	687	340	170	90
18	460	408	744	510	210	152	380	447	665	333	175	99
19	480	384	732	501	205	152	364	456	643	319	185	99
20	500	384	687	492	200	195	356	474	621	312	180	99
21	520	440	676	510	195	240	356	474	610	305	175	99
22	560	480	643	510	190	264	340	474	590	298	170	108
23	600	504	632	474	185	298	356	483	580	291	165	117
24	640	512	610	447	180	305	356	474	570	298	165	128
25	660	529	570	420	175	312	372	483	550	284	165	152
26	660	601	530	396	165	319	396	483	530	284	170	170
27	640	670	510	380	160	319	404	501	520	277	170	185
28	620	710	501	372	156	319	420	530	492	264	165	195
29	620	710	520	356	---	319	429	550	474	264	152	200
30	640	730	530	340	---	326	438	580	465	252	148	228
31	640	---	550	326	---	319	---	590	---	246	144	---
TOTAL	15180	15998	24301	15034	6800	6411	11928	14931	18802	10743	5533	3775
MEAN	490	533	784	485	243	207	398	482	627	347	178	126
MAX	660	730	1250	560	326	326	465	590	720	465	234	228
MIN	360	384	501	326	156	144	319	429	465	246	144	90
CFSM	4.90	5.33	7.84	4.85	2.43	2.07	3.98	4.82	6.27	3.47	1.78	1.26
IN.	5.65	5.95	9.04	5.59	2.53	2.38	4.44	5.55	6.99	4.00	2.06	1.40
AC-FT	30110	31730	48200	29820	13490	12720	23660	29620	37290	21310	10970	7490

WTR YR 1979 TOTAL 149436 MEAN 409 MAX 1250 MIN 90 CFSM 4.09 IN 55.59 AC-FT 296400

15296600 KARLUK RIVER AT OUTLET NEAR LARSEN BAY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974-76 and 1979.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: August 1975 to September 1976 and November 1978 to September 1979.

INSTRUMENTATION.--Temperature recorder Aug. 21, 1975 to Sept. 30, 1976, and Nov. 17, 1978 to Sept. 30, 1979.

REMARKS.--Records represent water temperature at the sensor within 0.5°C. Temperature at sensor was compared with the average for the river by temperature cross-section on June 28 and Aug. 7. No variation was found within the cross section.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 17.0°C, Aug. 8, 11, 1979; minimum, 1.0°C, Feb. 15-27, 1979.

EXTREMES FOR CURRENT PERIOD.--
WATER TEMPERATURES: Maximum, 17.0°C, Aug. 8, 11; minimum 1.0°C Feb. 15-27.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	STREAMFLOW, INSTANTANEOUS (CFS)	TEMPERATURE (DEG C)
JUN					
28...	1000	260	--	420	--
28...	1001	--	.0	--	8.8
28...	1002	--	10	--	8.8
28...	1009	--	80	--	8.8
28...	1010	--	90	--	8.7
28...	1018	--	170	--	8.7
28...	1019	--	180	--	8.8
28...	1022	--	210	--	8.8
28...	1023	--	220	--	8.9
28...	1024	--	230	--	9.0
28...	1026	--	250	--	9.0
28...	1027	--	252	--	8.9
AUG					
07...	0900	200	--	194	--
07...	0901	--	199	--	14.3
07...	0907	--	150	--	14.3
07...	0913	--	90	--	14.3
07...	0914	--	80	--	14.4
07...	0916	--	60	--	14.4
07...	0919	--	30	--	14.4
07...	0920	--	20	--	14.4

15296600 KARLUK RIVER AT OUTLET NEAR LARSEN BAY--Continued

TEMPERATURE (DEG. C) OF WATER, NOVEMBER TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			---	---	4.5	4.0	3.0	3.0	2.0	2.0	1.5	1.5
2			---	---	4.0	4.0	3.0	3.0	2.0	2.0	1.5	1.5
3			---	---	4.0	4.0	3.0	3.0	2.0	2.0	2.0	1.5
4			---	---	4.0	4.0	3.0	3.0	2.0	2.0	1.5	1.5
5			---	---	4.0	4.0	3.0	3.0	2.0	2.0	2.0	1.5
6			---	---	4.0	4.0	3.0	3.0	2.0	2.0	2.0	1.5
7			---	---	4.0	4.0	3.0	3.0	2.0	1.5	2.0	1.5
8			---	---	4.0	4.0	3.0	2.5	1.5	1.5	1.5	1.5
9			---	---	4.0	4.0	3.0	2.5	1.5	1.5	2.0	1.5
10			---	---	4.0	3.5	3.0	3.0	1.5	1.5	2.0	2.0
11			---	---	4.0	3.0	3.0	3.0	2.0	1.5	2.5	2.0
12			---	---	4.0	3.5	3.0	3.0	2.0	1.5	2.0	1.5
13			---	---	4.0	4.0	3.0	3.0	1.5	1.5	2.0	1.5
14			---	---	4.0	4.0	3.0	2.5	1.5	1.5	2.0	1.5
15			---	---	4.0	4.0	3.0	2.5	1.5	1.0	2.0	2.0
16			---	---	4.0	3.0	3.0	3.0	1.5	1.0	2.0	2.0
17			4.5	4.0	3.5	3.0	3.0	2.5	1.0	1.0	2.0	2.0
18			4.5	4.5	3.5	3.5	3.0	3.0	1.0	1.0	2.0	2.0
19			5.0	4.5	3.5	3.5	3.0	2.5	1.0	1.0	2.0	2.0
20			5.0	5.0	3.5	3.5	2.5	2.0	1.0	1.0	2.0	2.0
21			5.0	5.0	3.5	3.0	2.0	2.0	1.0	1.0	2.0	1.5
22			5.0	5.0	3.5	3.0	2.0	2.0	1.0	1.0	1.5	1.5
23			5.0	5.0	3.0	3.0	2.0	2.0	1.0	1.0	2.0	1.5
24			5.0	5.0	3.0	3.0	2.0	2.0	1.0	1.0	2.0	1.5
25			5.0	4.5	3.0	3.0	2.0	2.0	1.0	1.0	2.0	1.5
26			4.5	4.5	3.0	3.0	2.0	2.0	1.5	1.0	2.0	1.0
27			4.5	4.5	3.0	3.0	2.0	2.0	1.5	1.0	2.5	1.5
28			4.5	4.5	3.0	3.0	2.0	2.0	1.5	1.5	2.0	2.0
29			4.5	4.5	3.0	3.0	2.0	2.0	---	---	2.0	2.0
30			4.5	4.0	3.0	3.0	2.0	2.0	---	---	2.0	2.0
31			---	---	3.0	3.0	2.0	2.0	---	---	2.5	2.0
MONTH					4.5	3.0	3.0	2.0	2.0	1.0	2.5	1.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	2.5	2.0	5.5	4.0	6.5	5.5	12.0	11.0	16.0	13.5	14.5	13.0
2	2.5	2.0	5.0	3.5	6.5	6.0	12.0	10.0	16.0	13.5	14.5	12.5
3	2.5	2.0	4.0	3.5	7.0	6.5	14.5	10.0	18.0	14.0	13.5	10.5
4	2.5	2.0	5.0	3.5	9.5	6.5	14.5	12.5	17.5	15.5	13.5	11.5
5	3.0	2.0	4.5	4.0	8.0	6.0	13.0	12.0	16.0	15.5	13.0	10.0
6	3.0	2.0	4.0	3.5	7.0	5.5	13.0	7.5	15.5	15.0	13.5	8.5
7	3.0	2.0	4.0	3.5	7.0	5.5	10.0	7.0	16.0	14.5	13.5	11.5
8	4.0	2.5	4.0	3.5	7.0	6.5	11.5	8.5	17.0	14.0	14.0	12.0
9	3.0	2.5	4.5	4.0	6.5	5.0	10.0	9.5	16.5	14.0	14.5	11.0
10	2.5	2.5	4.0	4.0	5.0	5.0	9.5	7.5	16.0	15.0	13.0	11.5
11	3.0	2.5	7.0	4.0	5.0	5.0	10.5	9.0	17.0	15.0	13.0	11.5
12	3.0	2.5	7.0	5.5	5.0	4.5	11.5	10.5	16.5	14.0	11.5	10.0
13	3.0	2.5	7.5	5.0	4.5	4.5	12.0	11.0	15.5	14.0	10.0	7.0
14	3.0	2.0	6.0	5.0	5.5	4.5	14.5	12.0	15.0	14.5	11.5	7.0
15	3.0	2.5	6.0	5.0	8.5	5.0	14.5	13.5	15.0	14.5	11.5	11.0
16	2.5	2.5	6.5	4.5	8.5	8.5	13.5	13.0	15.0	14.5	12.0	10.0
17	3.0	2.5	6.5	5.0	9.0	8.5	14.0	13.0	16.0	14.5	10.0	8.0
18	3.0	2.5	5.5	5.0	11.0	9.0	15.5	13.0	16.0	14.5	11.0	9.0
19	3.0	2.5	6.5	5.0	10.0	8.0	15.0	13.0	15.5	14.5	12.0	11.0
20	4.0	3.0	6.0	5.5	8.5	8.0	15.0	12.5	15.0	14.5	11.5	11.0
21	4.0	3.0	6.0	5.0	9.0	8.0	15.0	14.5	16.0	13.5	11.0	10.5
22	4.0	3.0	6.0	5.5	10.5	9.0	15.0	14.5	16.0	14.0	11.5	10.5
23	4.5	3.0	6.0	5.0	12.0	9.5	15.0	14.5	16.5	14.0	11.0	10.5
24	4.5	3.0	6.5	5.5	12.0	10.5	15.0	14.0	16.0	14.0	11.0	10.0
25	4.5	3.0	6.5	5.0	10.5	9.0	14.0	13.5	16.0	14.0	10.5	9.5
26	3.5	2.5	5.5	4.5	10.5	9.0	14.5	13.0	16.5	14.0	11.0	10.0
27	4.5	3.5	10.0	4.5	9.0	8.0	15.0	14.0	16.0	15.0	10.5	10.0
28	3.5	3.5	9.5	7.5	10.5	8.0	15.5	14.0	15.5	14.0	10.0	9.5
29	4.0	3.5	9.0	8.0	11.0	8.5	15.5	14.5	14.0	11.5	10.0	9.5
30	6.5	4.0	8.5	7.5	11.0	11.0	15.5	14.0	13.5	11.5	10.0	9.0
31	---	---	8.0	6.0	---	---	14.5	14.0	14.0	13.5	---	---
MONTH	6.5	2.0	10.0	3.5	12.0	4.5	15.5	7.0	18.0	11.5	14.5	7.0
YEAR	18.0	1.0										

15297200 MYRTLE CREEK NEAR KODIAK

LOCATION.--Lat 57°36'12", long 152°24'12", in NE¼SW¼ sec.6, T.30 S., R.19 W., Kodiak Island Borough, Hydrologic Unit 19050001, on Kodiak Island, on left bank 0.1 mi (0.2 km) upstream from bridge, 0.3 mi (0.5 km) upstream from mouth, and 13 mi (21 km) south of Kodiak.

DRAINAGE AREA.--4.74 mi² (12.28 km²).

PERIOD OF RECORD.--May 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 20 ft (6 m), from topographic map. Prior to Apr. 4, 1977 at site 200 ft (60 m) downstream on right bank at same datum.

REMARKS.--Records fair except those for Feb. 3 to Mar. 7, which are poor. Periodic high tides cause backwater at the gage and are shown on the stage record. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--16 years, 46.0 ft³/s (1.303 m³/s), 131.79 in/yr (3,347 mm/yr), 33,330 acre-ft/yr (41.1 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,350 ft³/s (38.2 m³/s) Jan. 3, 1977, gage height, 5.61 ft (1.710 m) site then in use, 6.93 ft (2.112 m) from floodmarks at present site, from rating curve extended above 400 ft³/s (11.3 m³/s) on the basis of slope-area measurement of peak flow; maximum gage height, 8.40 ft (2.560 m) Mar. 28, 1964, at site then in use, tidal wave caused by earthquake; minimum daily discharge, about 1.0 ft³/s (0.028 m³/s) Mar. 3-18, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 550 ft³/s (16 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 16	2130	*1,180	33.4	*6.60	2.012	June 1	Unknown	Unknown		Unknown	
Dec. 29	0200	924	26.2	6.01	1.832	Sept.25	1700	679	19.2	5.34	1.628

Minimum discharge recorded, 6.2 ft³/s (0.176 m³/s) July 22, but may have been less during periods of no gage-height record, Feb. 5-10, 20-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	30	82	131	13	40	90	90	500	8.4	11	13
2	8.4	25	52	91	13	50	70	70	174	8.4	10	11
3	12	30	34	235	12	40	50	57	360	7.9	8.9	10
4	252	34	32	198	11	35	40	44	180	8.4	8.4	9.5
5	126	49	37	264	9.0	40	30	42	83	7.9	7.9	8.9
6	64	37	120	127	8.0	30	80	41	230	7.9	7.9	8.4
7	41	29	165	67	7.0	50	70	36	67	7.0	7.5	8.4
8	31	24	182	47	7.0	103	50	32	76	6.6	13	8.4
9	41	23	79	49	8.0	135	40	31	61	7.0	92	7.9
10	31	30	46	199	8.0	82	35	28	53	6.6	180	8.9
11	24	23	48	122	9.0	67	30	28	47	7.9	112	113
12	28	23	38	75	9.0	54	28	33	38	7.9	72	231
13	42	24	32	61	8.0	94	26	34	32	8.4	202	289
14	27	21	28	69	8.0	89	23	41	28	7.9	89	97
15	30	18	25	82	8.0	52	22	90	30	7.9	246	52
16	558	17	20	79	9.0	34	19	80	24	8.4	110	115
17	305	16	18	49	9.0	28	23	70	21	7.9	61	135
18	108	15	16	34	9.0	23	37	60	22	7.5	48	67
19	67	26	15	29	10	20	34	69	16	7.5	140	52
20	47	30	14	29	10	38	33	75	16	7.0	64	44
21	36	64	15	62	9.0	126	34	119	16	7.0	44	41
22	30	48	19	40	8.0	92	36	144	14	6.6	34	165
23	117	32	13	30	7.0	57	37	112	14	8.4	28	75
24	99	24	10	24	10	44	49	124	14	100	24	212
25	64	70	10	18	50	37	67	144	14	44	21	292
26	46	198	13	38	70	34	60	82	13	28	18	135
27	34	115	16	20	40	31	48	69	11	22	16	71
28	29	60	227	13	30	23	48	58	10	17	15	48
29	73	38	317	12	---	22	60	65	8.9	14	14	45
30	49	36	236	11	---	21	80	64	9.5	14	13	107
31	37	---	352	11	---	24	---	300	---	13	12	---
TOTAL	2464.8	1209	2311	2316	409.0	1615	1349	2332	2182.4	428.4	1729.6	2480.4
MEAN	79.5	40.3	74.5	74.7	14.6	52.1	45.0	75.2	72.7	13.8	55.8	82.7
MAX	558	198	352	264	70	135	90	300	500	100	246	292
MIN	8.4	15	10	11	7.0	20	19	28	8.9	6.6	7.5	7.9
CFSM	16.8	8.50	15.7	15.8	3.08	11.0	9.49	15.9	15.3	2.91	11.8	17.4
IN.	19.34	9.49	18.13	18.17	3.21	12.67	10.58	18.30	17.12	3.36	13.57	19.46
AC-FT	4890	2400	4580	4590	811	3200	2680	4630	4330	850	3430	4920

CAL YR 1978 TOTAL 21417.7 MEAN 58.7 MAX 558 MIN 5.2 CFSM 12.4 IN 168.05 AC-FT 42480
WTR YR 1979 TOTAL 20826.6 MEAN 57.1 MAX 558 MIN 6.6 CFSM 12.0 IN 163.41 AC-FT 41310

NOTE.--No gage-height record Feb. 7 to Mar. 7.

15297900 ESKIMO CREEK AT KING SALMON

LOCATION.--Lat 58°41'08", long 156°40'08", in SW¼ sec.23, T.17 S., R.44 W., Hydrologic Unit 19040002, on right bank 30 ft (9.1 m) upstream from culvert on King Salmon-Naknek road 0.3 mi (0.5 km) upstream from mouth and 0.3 mi (0.5 km) northwest of King Salmon post office.

DRAINAGE AREA.--16.1 mi^2 (41.7 km^2).

PERIOD OF RECORD.--Annual maximums, water years 1965-67, 1969-73. October 1973 to September 1976 and October 1977 to current year.

GAGE.--Water-stage recorder and culvert control. Altitude of gage is 20 ft (6 m), from topographic map. Prior to Oct. 18, 1973, crest-stage gage on right bank at datum 2.69 ft (0.820 m) lower.

REMARKS.--Records fair except those for Nov. 3 to Dec. 4 and Dec. 9 to May 21, which are poor.

AVERAGE DISCHARGE.--5 years (water years 1974-76, 1978-79), 12.3 ft^3/s (0.348 m^3/s), 10.37 in/yr (263 mm/yr), 8,910 acre-ft/yr (11.0 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 227 ft^3/s (6.43 m^3/s) June 1967, gage height, 8.51 ft (2.594 m), present datum, from rating curve extended above 40 ft^3/s (1.1 m^3/s) on basis of computation of peak flow through culvert; maximum gage height, 8.72 ft (2.658 m) Aug. 19, 1976, backwater from beaver dam; minimum daily discharge, 3 ft^3/s (0.085 m^3/s) Feb. 19-24, 1974 and Feb. 16-18, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 87 ft^3/s (2.47 m^3/s), Dec. 7, gage height, 7.65 ft (2.332 m); minimum daily, about 3 ft^3/s (0.08 m^3/s) February 16-18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	31	13	10	13	4.5	18	9.0	6.0	10	11	15
2	11	30	14	9.0	12	4.5	22	9.0	6.3	10	11	15
3	10	22	15	9.0	8.0	4.0	20	9.0	6.5	9.6	10	14
4	10	22	14	9.0	6.0	4.0	20	9.0	6.3	9.6	9.4	12
5	12	18	16	9.0	6.0	4.0	20	10	6.1	10	9.2	12
6	17	18	27	9.0	5.6	4.5	17	10	6.3	14	9.0	10
7	22	15	66	9.0	5.5	5.0	17	9.5	6.5	16	9.2	9.6
8	21	14	77	8.0	5.0	5.0	15	9.5	6.7	15	9.4	9.4
9	20	14	50	8.0	5.0	6.0	15	9.5	6.3	15	9.6	9.0
10	19	18	30	8.0	4.5	6.0	14	9.5	6.0	15	9.4	9.0
11	19	18	20	9.0	4.5	7.0	14	10	6.1	14	8.5	9.2
12	20	16	15	9.0	4.0	8.0	13	10	6.0	13	8.5	9.0
13	18	14	10	9.0	4.0	8.0	14	9.5	5.8	12	9.8	8.7
14	19	13	8.0	10	3.5	8.0	12	9.5	6.0	12	12	7.9
15	17	10	7.0	12	3.5	7.0	9.0	9.5	8.1	11	15	8.5
16	17	10	6.0	11	3.0	7.0	9.0	9.5	11	12	21	10
17	20	11	6.0	10	3.0	6.0	10	9.0	11	12	26	11
18	21	11	7.0	9.0	3.0	6.0	12	9.0	12	10	28	10
19	25	12	7.0	8.0	3.5	6.0	13	9.0	11	9.4	29	10
20	26	15	8.0	8.0	3.5	8.0	14	8.5	10	8.5	29	10
21	26	18	9.0	9.0	4.0	10	14	8.5	9.8	8.3	28	10
22	19	18	11	10	4.0	14	13	8.3	9.2	7.9	23	10
23	18	16	11	10	4.0	14	13	7.5	8.3	9.6	18	12
24	20	14	9.0	9.0	3.5	13	12	6.9	8.3	14	16	12
25	23	14	8.0	8.0	3.5	13	12	6.5	8.5	15	14	12
26	25	14	8.0	8.0	4.0	12	13	6.3	9.0	15	13	12
27	26	15	8.0	9.0	4.0	11	13	6.0	9.6	14	12	13
28	24	16	9.0	9.0	4.0	11	12	5.6	9.2	13	12	12
29	25	15	10	10	---	11	10	5.4	8.5	12	11	12
30	28	14	10	10	---	13	9.0	5.4	8.5	12	11	12
31	30	---	10	12	---	15	---	5.6	---	12	14	---
TOTAL	620	486	519.0	287.0	137.1	255.5	419.0	259.5	238.9	370.9	456.0	326.3
MEAN	20.0	16.2	16.7	9.26	4.90	8.24	14.0	8.37	7.96	12.0	14.7	10.9
MAX	30	31	77	12	13	15	22	10	12	16	29	15
MIN	10	10	6.0	8.0	3.0	4.0	9.0	5.4	5.8	7.9	8.5	7.9
CFSM	1.24	1.01	1.04	.58	.30	.51	.87	.52	.49	.75	.91	.68
IN.	1.43	1.12	1.20	.66	.32	.59	.97	.60	.55	.86	1.05	.75
AC-FT	1230	964	1030	569	272	507	831	515	474	736	904	647

CAL YR 1978 TOTAL 4121.7 MEAN 11.3 MAX 77 MIN 4.0 CFSM .70 IN 9.52 AC-FT 8180
WTR YR 1979 TOTAL 4375.2 MEAN 12.0 MAX 77 MIN 3.0 CFSM .75 IN 10.11 AC-FT 8680

NOTE.--No gage-height record Dec. 9 to May 21.

15300500 KVICHAK RIVER AT IGIUGIG

LOCATION.--Lat 59°19'44", long 155°53'57", in NE¼ sec.7, T.10 S., R.39 W., Hydrologic Unit 19040002, on left bank 0.7 mi (1.1 km) downstream from outlet of Iliamna Lake at Igiugig.

DRAINAGE AREA.--6,500 mi^2 (16,800 km^2), approximately.

PERIOD OF RECORD.--August 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 45 ft (14 m), from topographic map. Prior to Oct. 1, 1969, nonrecording gage at site 1,500 ft (460 m) upstream at different datum.

REMARKS.--Records good except those for Dec. 22 to Apr. 10, which are poor. Discharge affected by storage in Lake Iliamna, Lake Clark, and other smaller lakes covering over 1,100 mi^2 (2,800 km^2). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--12 years, 17,130 ft^3/s (485.1 m^3/s), 35.78 in/yr (909 mm/yr), 12,410,000 acre-ft/yr (15.3 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 43,000 ft^3/s (1,220 m^3/s) Sept. 21, 22, 1967; minimum daily, 6,400 ft^3/s (181 m^3/s) Apr. 21,22, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 29,600 ft^3/s (838 m^3/s) Aug. 31, gage height, 21.68 ft (6.608 m), affected by seiche; minimum, 9,940 ft^3/s (282 m^3/s) May 2, gage height, 18.11 ft (5.520 m), momentary blockage by ice at lake outlet. Minimum may have been less during periods of questionable gage-height record, Dec. 24, and of no gage-height record, Apr. 1-9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20200	17000	15100	14000	13500	12500	12000	11500	14800	19000	24000	29100
2	19800	16800	14900	14400	13500	12500	12000	11700	15100	19300	24200	28800
3	20100	17500	14800	14500	13500	12500	12000	11500	15000	19400	24300	28600
4	19900	16900	14800	14000	13500	12500	12200	11700	15000	19500	24200	28500
5	20400	16800	15000	14000	13500	12500	12300	11800	15000	19600	24100	28400
6	20100	16400	16100	13800	13500	12500	12100	11800	15400	19800	24100	28200
7	20100	16300	15300	13900	13500	12500	11900	11800	15500	20400	24300	28200
8	19600	16600	15400	14000	13500	12500	11900	12300	15300	20900	24900	28000
9	19800	17100	14700	14000	13500	12500	11800	12900	15200	21100	25500	28100
10	19400	16400	14800	14000	13500	12500	11800	12800	15100	21400	25100	28200
11	19200	16400	15100	14000	13500	12500	11700	13100	15300	21300	25300	27600
12	19500	16200	15600	13900	13500	12500	11700	13200	15700	21600	25600	27600
13	19200	16100	14800	14100	13500	12500	11400	13100	15800	21600	25400	26900
14	19500	16100	14800	14000	13500	12500	11400	13200	16000	21700	25700	26500
15	20100	15900	14600	14700	13500	12500	11400	13800	16500	21900	26300	26800
16	21700	16000	14700	14200	13000	12500	11400	13700	16800	22000	25600	26600
17	19800	16100	15400	14400	13000	12500	11500	13800	16800	22000	26000	26200
18	19200	16900	14700	14100	13000	12500	11300	13400	17000	22000	27600	26200
19	19200	16100	14900	14400	13000	12500	11300	13600	16900	22200	27100	26100
20	19100	15400	14500	14800	13000	12500	11200	14200	17100	22400	27100	25800
21	18900	15900	14600	14600	13000	12500	11200	14300	17400	22900	27500	26200
22	18700	15300	15000	14300	13000	12500	11200	13600	17600	23100	28000	26500
23	20400	15300	14500	14100	13000	12500	11100	13900	17600	23700	28300	25400
24	19000	15600	14600	14000	13000	12500	11100	13800	17800	23300	28600	25700
25	18300	16200	14300	14000	13000	12500	11100	13800	17800	23000	29000	27100
26	17400	16400	14600	13900	13000	12000	11300	13700	18000	23400	28900	26700
27	17400	15300	14800	13600	13000	12000	11300	13800	18300	23700	28900	25100
28	17800	15100	14800	13800	13000	12000	11700	14200	18400	24000	28900	25500
29	17600	15000	14200	14000	---	12000	11400	14700	18700	24000	29100	25900
30	17400	15700	14100	13900	---	12000	11500	14600	19100	24000	29200	25500
31	17400	---	14100	13500	---	12000	---	14400	---	24000	29400	---
TOTAL	596200	484800	459600	436900	371500	384500	347200	409700	496000	678200	822200	809900
MEAN	19230	16160	14830	14090	13270	12400	11570	13220	16530	21880	26520	27000
MAX	21700	17500	16100	14800	13500	12500	12300	14700	19100	24000	29400	29100
MIN	17400	15000	14100	13500	13000	12000	11100	11500	14800	19000	24000	25100
CFSM	2.96	2.49	2.28	2.17	2.04	1.91	1.78	2.03	2.54	3.37	4.08	4.15
IN.	3.41	2.77	2.63	2.50	2.13	2.20	1.99	2.34	2.84	3.88	4.71	4.64
AC-FT	1183000	961600	911600	866600	736900	762700	688700	812600	983800	1345000	1631000	1606000

CAL YR 1978 TOTAL 5455670 MEAN 14950 MAX 22100 MIN 9510 CFSM 2.30 IN 31.22 AC-FT 10820000
WTR YR 1979 TOTAL 6296700 MEAN 17250 MAX 29400 MIN 11100 CFSM 2.65 IN 36.04 AC-FT 12490000

NOTE.--No gage-height record Jan. 26 to Apr. 10.

15302000 NUYAKUK RIVER NEAR DILLINGHAM

LOCATION.--Lat 59°56'04", long 158°11'05", in NE¼ sec.10, T.3 S., R.52 W., Hydrologic Unit 19040002, on left bank 1,000 ft (300 m) downstream from Tikchik Lake, 0.5 mi (0.8 km) upstream from unnamed tributary, and 62 mi (100 km) north of Dillingham.

DRAINAGE AREA.--1,490 mi² (3,860 km²), approximately.

PERIOD OF RECORD.--May 1953 to current year.

REVISED RECORDS.--WRD Alaska 1972: 1971.

GAGE.--Water-stage recorder. Altitude of gage is 325 ft (99 m), from topographic map. Prior to Oct. 1, 1957, at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records good except those for periods of no gage-height record, Oct. 16 to Nov. 16 and June 12-25, which are fair, and Jan. 4 to Apr. 17, which are poor. Discharge affected by storage in Tikchik Lake, Nuyakuk Lake, Lake Chauekuktuli, and other smaller lakes in the basin covering over 170 mi² (440 km²).

AVERAGE DISCHARGE.--26 years, 6,010 ft³/s (170.2 m³/s), 54.78 in/yr (1,391 mm/yr), 4,354,000 acre-ft/yr (5.37 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,200 ft³/s (912 m³/s) July 2, 1977, gage height, 10.49 ft (3.197 m); minimum daily, about 770 ft³/s (21.8 m³/s) Apr. 16-30, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 21,000 ft³/s (595 m³/s) June 19-22; minimum daily, about 1,800 ft³/s (51 m³/s) Mar. 11-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUFS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7300	5600	4900	4040	2800	2000	2000	3000	13800	17300	12000	14500
2	7130	5600	4900	4050	2800	2000	2000	3200	14400	17000	11700	14000
3	6810	5600	4890	3820	2800	2000	2000	3400	15200	17000	11400	13500
4	6760	5600	4830	3800	2600	1900	2000	3600	16000	17000	11100	12700
5	6600	5600	4810	3600	2600	1900	2000	3800	16600	16700	10800	12000
6	6550	5600	4850	3600	2600	1900	2000	4000	17200	16800	10600	11300
7	6460	5600	4890	3600	2600	1900	2000	4200	17700	16500	10300	10800
8	6350	5400	4920	3600	2600	1900	2000	4400	18100	16300	9810	10500
9	6200	5400	4930	3600	2400	1900	2000	4600	18400	16200	9630	9960
10	6040	5400	4870	3600	2400	1900	2200	4800	18600	15900	10200	9510
11	5940	5400	4850	3400	2400	1800	2200	5000	19000	15600	10600	9180
12	5810	5400	4770	3400	2400	1800	2200	5400	19000	15200	10800	8850
13	5690	5400	4820	3400	2400	1800	2200	5600	19000	14900	11500	8480
14	5510	5400	4640	3400	2400	1800	2200	5800	19000	14700	12000	8100
15	5400	5400	4530	3400	2200	1800	2200	6000	19500	14400	13000	7870
16	5600	5300	4410	3200	2200	1800	2400	6500	20000	14100	14000	7890
17	5800	5290	4400	3200	2200	1800	2400	6500	20000	14000	15000	7590
18	6000	5230	4380	3200	2200	1800	2350	7000	20500	13700	16000	7250
19	6200	5200	4300	3200	2200	1800	2420	7000	21000	13400	17000	7090
20	6200	5200	4260	3200	2200	1800	2420	7500	21000	13100	19000	6960
21	6000	5200	4150	3200	2200	1900	2420	8000	21000	12800	20000	6780
22	5800	5200	4130	3200	2200	1900	2420	8480	21000	12400	20200	6810
23	5800	5200	4120	3000	2000	1900	2420	8770	20500	12400	19900	7290
24	5600	5150	4060	3000	2000	1900	2470	9230	20000	13100	19600	7210
25	5800	5100	4010	3000	2000	1900	2570	9660	19500	13400	19200	7060
26	5800	5030	3990	3000	2000	1900	2580	10100	19000	13300	18600	7200
27	5600	5080	3960	3000	2000	1900	2600	10600	18700	13100	18000	7600
28	5600	5080	3890	3000	2000	1900	2800	11200	18300	12900	17400	7800
29	5600	5090	3970	3000	---	1900	2800	11900	17800	12700	16700	7800
30	5600	5000	3990	2800	---	1900	3000	12500	17500	12600	15900	7600
31	5600	---	4050	2800	---	2000	---	13100	---	12300	15100	---
TOTAL	187150	159750	138470	103310	65400	58300	69270	214840	557300	450800	447040	271180
MEAN	6037	5325	4467	3333	2336	1881	2309	6930	18580	14540	14420	9039
MAX	7300	5600	4930	4050	2800	2000	3000	13100	21000	17300	20200	14500
MIN	5400	5000	3890	2800	2000	1800	2000	3000	13800	12300	9630	6780
CFSM	4.05	3.57	3.00	2.24	1.57	1.26	1.55	4.65	12.5	9.76	9.68	6.07
IN.	4.67	3.99	3.46	2.58	1.63	1.46	1.73	5.36	13.91	11.25	11.16	6.77
AC-FT	371200	316900	274700	204900	129700	115600	137400	426100	1105000	894200	886700	537900

CAL YR 1978 TOTAL 2541560 MEAN 6963 MAX 17800 MIN 1690 CFSM 4.67 IN 63.45 AC-FT 5041000
WTR YR 1979 TOTAL 2722810 MEAN 7460 MAX 21000 MIN 1800 CFSM 5.01 IN 67.98 AC-FT 5401000

15302500 NUSHAGAK RIVER AT EKWOK
(National stream-quality accounting network station)

LOCATION.--Lat 59°20'57", long 157°28'46", in SE¼SE¼ sec.35, T.9 S., R.48 W., Hydrologic Unit 19040002, on right bank at Ekwok, 0.6 mi (1.0 km) upstream from Klutuk Creek, and 40 mi (64 km) northeast of Dillingham.

DRAINAGE AREA.--9,850 mi² (25,500 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Nonrecording gage. Altitude of gage is 90 ft (27 m), from topographic map.

REMARKS.--Water-discharge records good except those for period of no gage-height record, Nov. 16 to Apr. 28, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 87,100 ft³/s (2,470 m³/s) Oct. 12, 1977, gage height, 10.64 ft (3.243 m); maximum gage height, 14.46 ft (4.407 m) in April 1979, from floodmarks, backwater from ice; minimum daily discharge, about 6,000 ft³/s (170 m³/s) Mar. 1 to 12, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 54,700 ft³/s (1,630 m³/s) May 4, gage height, 10.44 ft (3.182 m); from graph based on twice-daily gage readings; maximum gage-height, 14.46 ft (4.407 m) in April, from floodmarks, backwater from ice; minimum daily discharge, about 6,000 ft³/s (170 m³/s) Mar. 1 to 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21200	29800	15000	12000	9000	6000	8200	55400	49500	35300	27900	29000
2	20700	27100	15000	12000	8800	6000	8400	57200	48200	34600	26900	28100
3	20200	23700	15000	12000	8600	6000	8600	56900	47200	34200	26000	27100
4	19600	23100	15000	11000	8600	6000	9000	56700	46700	33600	25300	26000
5	19600	23000	14000	11000	8200	6000	9500	54600	46500	33100	24500	24900
6	20000	22800	14000	11000	8000	6000	10000	55200	45300	32800	24100	23800
7	20900	22100	14000	11000	7800	6000	11000	55000	44000	32900	23700	23000
8	22000	22000	14000	11000	7800	6000	12000	54100	43300	33100	23200	22400
9	21900	21800	14000	11000	7600	6000	13000	53200	42700	33500	22800	22000
10	21100	21600	13000	11000	7400	6000	14000	51700	41600	33500	22600	21400
11	20500	21600	13000	11000	7200	6000	15000	49600	40700	33000	23500	20900
12	20200	21600	13000	11000	7000	6000	16000	47000	39800	32100	24100	20400
13	19800	21400	13000	10500	6800	6200	16000	44700	40600	30900	24400	19900
14	19400	20000	13000	10500	6800	6200	16500	44800	40200	29900	25700	19400
15	18800	19000	13000	10500	6800	6200	17000	43900	40200	29400	27800	19300
16	18700	19000	13000	10500	6800	6200	18000	43300	41000	29300	30700	19700
17	19600	19000	13000	10500	6600	6200	18600	45600	42000	29200	32600	21000
18	25600	18000	12000	10500	6600	6400	19000	46800	43000	28800	34100	22500
19	34600	18000	12000	10300	6400	6400	21000	46200	43000	28300	35500	22000
20	34500	19000	12000	10000	6400	6400	22000	45800	41900	27600	39500	21800
21	30100	21000	12000	10000	6400	6400	24000	45800	40600	27100	43800	22200
22	25700	20000	12000	10000	6400	6600	26000	46500	39600	26600	42700	22100
23	23700	19000	12000	9500	6200	6800	29000	47400	38900	26200	39900	22400
24	25000	18000	11000	9500	6200	6800	33000	47200	37700	27400	37700	25000
25	29300	18000	11000	9500	6200	7000	37000	45800	36800	30300	36300	26200
26	32100	17000	11000	9500	6200	7200	40000	44800	36800	34200	34900	25600
27	31300	17000	11000	9500	6200	7200	43000	43800	36800	33200	34000	27700
28	27300	16000	12000	9000	6200	7400	45000	43800	37400	31000	32800	30100
29	26600	16000	12000	9000	---	7600	47300	47200	37200	29500	31400	28600
30	28800	15000	12000	9000	---	7800	49800	50000	36300	29000	30900	27100
31	29100	---	12000	9000	---	8000	---	50700	---	28800	29900	---
TOTAL	747900	610600	398000	321800	199000	201000	656900	1520700	1245500	958400	938700	711600
MEAN	24130	20350	12840	10380	7107	6484	21900	49050	41520	30920	30280	23720
MAX	34600	29800	15000	12000	9000	8000	49800	57200	49500	35300	43800	30100
MIN	18700	15000	11000	9000	6200	6000	8200	43300	36300	26200	22400	19300
CFSM	2.45	2.07	1.30	1.05	.72	.66	2.22	4.98	4.22	3.14	3.07	2.41
IN.	2.82	2.31	1.50	1.22	.75	.76	2.48	5.74	4.70	3.62	3.55	2.69
AC-FT	1483000	1211000	789400	638300	394700	398700	1303000	3016000	2470000	1901000	1862000	1411000

CAL YR 1978 TOTAL 7586300 MEAN 20780 MAX 49000 MIN 9500 CFSM 2.11 IN 28.65 AC-FT 15050000
WTR YR 1979 TOTAL 8510100 MEAN 23320 MAX 57200 MIN 6000 CFSM 2.37 IN 32.14 AC-FT 16880000

15302500 NUSHAGAK RIVER AT EKWOK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1979.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: May to September 1979.

INSTRUMENTATION.--Temperature recorder since May 10, 1979.

REMARKS.--Water-temperature records represent temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by temperature cross sections on May 23, July 18, and Aug. 21. A maximum variation of 0.5°C was found within the cross sections. River frozen during winter months.

EXTREMES FOR CURRENT PERIOD.--
WATER TEMPERATURES: Maximum, 17.5°C Aug. 3; minimum, 4.5°C May 10 and 17.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SAMPLING DEPTH (FT)	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	STREAM VELOCITY, POINT (FPS)	PERCENT OF TOTAL DEPTH	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
APR									
17...	1646	628	--	--	--	--	49	5.8	.3
17...	1647	453	--	--	--	--	49	5.8	.3
17...	1648	203	--	--	--	--	49	6.0	.3
MAY									
23...	2010	140	--	8.70	E5.20	--	44	7.2	--
23...	2011	140	1.7	8.70	--	20	--	--	7.9
23...	2012	140	5.2	8.70	--	60	--	--	7.9
23...	2013	140	7.0	8.70	--	80	--	--	7.9
23...	2020	240	--	13.0	5.30	--	44	7.2	--
23...	2021	240	2.7	13.0	6.40	20	--	--	7.6
23...	2022	240	8.0	13.0	--	60	--	--	7.6
23...	2023	240	11	13.0	4.20	80	--	--	7.6
23...	2030	290	--	14.0	5.90	--	44	7.2	--
23...	2031	290	2.8	14.0	6.50	20	--	--	7.4
23...	2032	290	8.3	14.0	--	60	--	--	7.5
23...	2033	290	11	14.0	5.20	80	--	--	7.5
23...	2040	365	--	12.0	3.70	--	44	7.1	--
23...	2041	365	2.4	12.0	3.60	20	--	--	7.3
23...	2042	365	7.2	12.0	--	60	--	--	7.4
23...	2043	365	9.6	12.0	3.90	80	--	--	7.5
23...	2050	465	--	11.0	3.90	--	44	7.1	--
23...	2051	465	2.2	11.0	4.40	20	--	--	7.4
23...	2052	465	6.7	11.0	--	60	--	--	7.4
23...	2053	465	8.9	11.0	3.50	80	--	--	7.4
23...	2100	565	--	9.80	5.30	--	43	7.1	--
23...	2101	565	2.0	9.80	5.60	20	--	--	7.3
23...	2102	565	5.9	9.80	--	60	--	--	7.4
23...	2103	565	7.8	9.80	5.10	80	--	--	7.4
23...	2110	640	--	10.0	5.90	--	43	7.1	--
23...	2111	640	2.0	10.0	6.50	20	--	--	7.3
23...	2112	640	6.1	10.0	--	60	--	--	7.3
23...	2113	640	8.2	10.0	5.20	80	--	--	7.3
23...	2120	715	--	9.90	6.30	--	43	7.1	--
23...	2121	715	2.0	9.90	7.40	20	--	--	7.2
23...	2122	715	6.0	9.90	--	60	--	--	7.3
23...	2123	715	7.9	9.90	5.20	80	--	--	7.3
23...	2130	815	--	10.0	E6.00	--	43	7.1	--
23...	2131	815	2.0	10.0	--	20	--	--	7.3
23...	2132	815	6.1	10.0	--	60	--	--	7.3
23...	2133	815	8.2	10.0	--	80	--	--	7.3
23...	2140	890	--	8.90	4.60	--	43	7.2	--
23...	2141	890	1.8	8.90	5.20	20	--	--	7.4
23...	2142	890	5.3	8.90	--	60	--	--	7.4
23...	2143	890	7.1	8.90	4.00	80	--	--	7.4
JUL									
18...	1905	160	.4	--	--	--	65	6.7	--
18...	1906	160	1.4	--	--	20	--	--	15.7
18...	1907	160	5.8	--	--	80	--	--	15.7
18...	1910	310	.4	--	--	--	63	6.7	--
18...	1911	310	2.2	--	--	20	--	--	15.3
18...	1912	310	9.0	--	--	80	--	--	15.3
18...	1915	485	.4	--	--	--	63	6.7	--
18...	1916	485	1.6	--	--	20	--	--	15.2
18...	1917	485	7.4	--	--	80	--	--	15.2
18...	1920	635	.4	--	--	--	63	6.7	--
18...	1921	635	1.6	--	--	20	--	--	15.2
18...	1922	635	7.4	--	--	80	--	--	15.2
18...	1925	785	.4	--	--	--	63	6.7	--
18...	1926	785	1.5	--	--	20	--	--	15.3
18...	1927	785	6.0	--	--	80	--	--	15.3
AUG									
21...	1801	200	.3	9.40	--	--	50	6.4	13.0
21...	1802	350	.3	14.0	--	--	--	6.4	12.9
21...	1803	550	.3	11.1	--	--	50	6.3	12.7
21...	1804	700	.3	9.40	--	--	--	6.2	12.7
21...	1805	900	.3	11.0	--	--	50	6.3	12.8

E ESTIMATED

15302500 NUSHAGAK RIVER AT EKWOK--Continued

DATE	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	SEDI- MENT, SUS- PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
APR								
17...	13.6	--	--	--	--	--	--	--
17...	13.5	--	--	--	--	--	--	--
17...	13.2	--	--	--	--	--	--	--
MAY								
23...	11.6	98	20	0	2.5	200	17	50
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	11.6	98	20	0	3.3	740	19	40
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	11.6	98	19	0	3.3	750	29	24
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	11.6	98	19	0	4.0	1100	19	55
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	11.6	98	19	0	2.9	730	25	43
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	11.7	99	19	0	3.1	700	22	51
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	11.7	99	20	0	2.9	690	20	52
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	11.8	100	19	0	3.3	690	16	56
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	11.7	99	19	0	3.1	690	13	64
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	11.8	101	20	0	3.7	670	14	65
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
JUL								
18...	10.2	100	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--
18...	10.2	100	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--
18...	10.2	99	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--
18...	10.4	101	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--
18...	10.4	101	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--
AUG								
21...	11.1	103	--	--	--	--	--	--
21...	10.9	101	--	--	--	--	--	--
21...	10.9	101	--	--	--	--	--	--
21...	11.0	102	--	--	--	--	--	--
21...	11.1	103	--	--	--	--	--	--

15302500 NUSHAGAK RIVER AT EKWOK--Continued

DATE	TIME	STREAM WIDTH (FT)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TURBIDITY (NTU)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
APR 17...	1645	928	18600	49	--	2.2	753	K2	K1	18	0	5.1
MAY 23...	2000	970	47600	44	--	5.0	758	K1	<1	16	0	4.5
JUL 18...	1900	960	28900	63	6.7	2.0	770	K2	<1	26	4	7.7
AUG 21...	1800	980	43800	50	--	2.7	767	40	K24	25	7	7.6

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
APR 17...	1.3	1.8	.3	22	0	3.0	1.2	.1	9.7	39	34	.09
MAY 23...	1.2	1.5	.5	19	0	3.9	1.0	.1	6.7	29	29	.07
JUL 18...	1.6	1.6	.4	27	0	8.7	.7	.1	6.9	36	41	.07
AUG 21...	1.4	1.5	.4	22	0	7.4	.7	.1	6.0	37	36	.05

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)
APR 17...	.01	.25	.26	.19	.07	.35	.02	.02	1	0	0	0
MAY 23...	.01	.06	.07	.00	.11	.14	.03	.01	1	1	0	0
JUL 18...	.07	.09	.16	.05	.11	.23	.02	.02	1	1	0	0
AUG 21...	.00	.16	.16	.09	.07	.21	.03	.00	--	--	--	--

DATE	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
APR 17...	8	0	0	<1	0	0	0	0	0	<3	15
MAY 23...	0	2	2	0	10	10	0	6	5	1	9
JUL 18...	10	0	0	<1	10	10	0	0	0	<3	10
AUG 21...	--	--	--	--	--	--	--	--	--	--	--

DATE	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
APR 17...	12	3	1100	830	270	--	--	--	50	30	20
MAY 23...	9	0	820	670	150	9	9	0	10	0	10
JUL 18...	10	0	320	200	120	9	9	0	10	6	4
AUG 21...	--	--	--	--	--	--	--	--	--	--	--

K NON-IDEAL COLONY COUNT

15302500 NUSHAGAK RIVER AT EKWOK--Continued

DATE	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)
APR 17...	.2	.0	.2	0	0	0	0	0	0	50	40
MAY 23...	.1	.0	.1	0	0	1	0	0	0	20	20
JUL 18...	.0	.0	.0	0	0	0	0	0	0	20	20
AUG 21...	--	--	--	--	--	--	--	--	--	--	--

DATE	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	BIOMASS CHLORO-PHYLL RATIO PERI-PHYTON (UNITS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
APR 17...	6	5.1	.3	--	--	--	--	--	24	1210	--
MAY 23...	0	2.3	--	.160	.240	.030	.000	2667	20	2570	37
JUL 18...	<3	1.4	.1	--	--	--	--	--	1	234	58
AUG 21...	--	--	--	--	--	--	--	--	31	3670	43

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO AUGUST 1979

DATE TIME	APR 17,79 1645	MAY 23,79 2000	JUL 18,79 1900	AUG 21,79 1800
TOTAL CELLS/ML	15	39	780	650
DIVERSITY: DIVISION	0.0	0.0	0.0	1.6
.CLASS	0.0	0.0	0.0	1.6
..ORDER	0.0	0.0	0.0	1.8
...FAMILY	0.0	1.6	0.0	2.9
....GENUS	0.0	1.6	0.0	3.1

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...COELASTRACEAE								
....COELASTRUM	--	-	--	-	--	-	86	13
...OOCYSTACEAE								
....ANKISTRODESMUS	15#	100	--	-	--	-	43	7
....OOCYSTIS	--	-	--	-	--	-	58	9
..ZYGNEMATALES								
...DESMIDIACEAE								
....EUASTRUM	--	-	--	-	--	-	14	2
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....MELOSIRA	--	-	--	-	--	-	14	2
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	13#	33	--	-	14	2
...CYMBELLACEAE								
....CYMBELLA	--	-	--	-	--	-	29	4
...FRAGILARIACEAE								
....FRAGILARIA	--	-	--	-	--	-	100#	16
....SYNEDRA	--	-	13#	33	--	-	14	2
...NITZSCHIACEAE								
....NITZSCHIA	--	-	13#	33	--	-	43	7
...TABELLARIACEAE								
....TABELLARIA	--	-	--	-	--	-	43	7
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	--	-	--	-	--	-	190#	29
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	--	-	780#	100	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

15302500 NUSHAGAK RIVER AT EKWOK--Continued

TEMPERATURE (DEG. C) OF WATER, MAY TO SEPTEMBER 1979

MAY 1979

DAY	MAX	MIN	MEAN	DAY	MAX	MIN	MEAN	DAY	MAX	MIN	MEAN
10	5.5	4.5	---	18	5.5	5.0	5.0	25	8.5	7.0	7.5
11	6.0	5.0	5.5	19	6.0	5.5	5.5	26	9.5	8.0	8.5
12	6.5	5.5	6.0	20	6.5	5.5	6.0	27	11.0	9.0	10.0
13	7.0	6.0	6.5	21	7.0	5.5	6.5	28	12.0	10.0	11.0
14	7.5	6.0	6.5	22	7.5	6.0	7.0	29	11.5	10.0	11.0
15	7.0	6.0	6.5	23	7.5	7.0	7.0	30	10.0	9.5	10.0
16	6.0	5.0	5.5	24	8.0	6.5	7.0	31	9.5	9.0	9.5
17	5.5	4.5	5.0					MONTH	12.0		

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	10.0	9.0	9.5	12.5	11.5	12.0	16.5	15.0	15.5	12.0	11.0	11.5
2	10.0	9.0	9.0	13.0	12.0	12.5	17.0	14.5	15.5	12.0	11.5	11.5
3	9.0	8.5	9.0	14.0	13.0	13.5	17.5	15.0	16.0	11.5	11.0	11.0
4	10.0	8.5	9.5	14.5	13.5	14.0	16.0	15.0	15.5	11.0	10.0	10.5
5	10.5	9.0	10.0	14.0	12.0	13.0	15.0	14.0	14.5	11.0	9.5	10.0
6	10.5	10.0	10.0	12.0	11.5	12.0	14.5	13.5	14.0	11.0	9.5	10.0
7	11.0	10.0	10.5	12.5	11.5	12.0	14.0	13.5	14.0	11.0	10.5	10.5
8	10.5	9.5	10.0	12.0	12.0	12.0	15.0	13.0	14.0	12.0	10.5	11.0
9	10.0	9.0	10.0	12.5	12.0	12.0	14.0	13.5	13.5	12.0	10.5	11.5
10	11.0	9.5	10.5	13.5	12.0	12.5	13.5	12.5	13.0	12.0	11.0	11.5
11	11.5	10.5	11.0	14.5	13.0	13.5	13.0	12.0	12.5	12.0	11.0	11.5
12	11.5	10.5	11.0	15.0	13.5	14.5	12.5	12.5	12.5	13.0	11.5	12.0
13	11.5	10.5	11.0	15.0	14.5	14.5	12.5	12.0	12.0	14.0	12.0	12.5
14	11.5	10.0	11.0	15.0	14.0	14.5	12.0	11.5	11.5	13.0	12.0	12.5
15	11.5	10.5	11.0	15.0	13.5	14.0	11.5	11.0	11.5	12.0	11.5	12.0
16	10.5	10.0	10.0	15.0	14.5	14.5	12.0	11.5	11.5	11.5	10.0	11.0
17	9.5	9.0	9.5	17.0	14.0	15.5	12.0	11.5	12.0	10.0	8.5	9.0
18	9.5	9.0	9.5	16.5	14.5	15.5	12.0	12.0	12.0	10.0	8.5	9.0
19	9.5	9.0	9.5	16.5	14.5	15.5	12.0	11.0	11.5	10.0	9.0	9.5
20	10.5	9.5	10.0	17.0	15.0	16.0	11.5	11.0	11.5	10.0	9.5	9.5
21	11.5	9.5	10.5	16.0	15.0	15.5	12.0	11.0	11.5	9.5	9.0	9.0
22	13.0	11.0	12.0	15.0	13.5	14.5	13.0	11.5	12.0	9.0	8.5	9.0
23	13.0	12.0	12.5	13.5	12.5	13.0	13.5	12.0	13.0	9.5	9.0	9.0
24	13.0	11.5	12.5	13.5	12.5	12.5	13.5	13.0	13.0	8.5	8.0	8.0
25	11.5	10.5	11.0	13.5	12.5	13.0	13.5	13.0	13.0	8.0	7.5	7.5
26	11.0	10.0	10.5	14.0	13.0	13.5	13.0	12.0	13.0	8.0	7.5	7.5
27	11.5	10.0	10.5	15.5	13.5	14.5	13.5	13.0	13.0	8.0	7.0	7.5
28	12.0	10.0	11.5	15.5	14.5	15.0	13.0	12.0	13.0	7.0	6.5	7.0
29	13.0	11.5	12.5	15.5	15.0	15.0	13.0	12.5	12.5	7.0	6.5	6.5
30	12.5	12.0	12.5	15.5	14.5	15.0	12.5	12.0	12.0	7.5	6.5	7.0
31	---	---	---	16.0	14.5	15.0	12.0	11.5	12.0	---	---	---
MONTH	13.0	8.5	10.5	17.0	11.5	14.0	17.5	11.0	13.0	14.0	6.5	10.0

15303150 SNAKE RIVER NEAR DILLINGHAM

LOCATION.--Lat 59°08'54", long 158°53'14", in NW¼SW¼ sec.9, T.12 S., R.57 W., Hydrologic Unit 19040002, on right bank at outlet of Lake Nunavaugaluk, 15 mi (24 km) northwest of Dillingham.

DRAINAGE AREA.--113 mi² (293 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 34 ft (10.4 m), from topographic map.

REMARKS.--Water-discharge records good except those for period of no gage-height record, Jan. 25 to May 4, which are poor. Discharge affected by storage in Lake Nunavaugaluk, surface area of 32 mi² (83 km²).

AVERAGE DISCHARGE.--6 years, 523 ft³/s (14.81 m³/s), 62.85 in/yr (1,596 mm/yr), 378,900 acre-ft/yr (467 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,470 ft³/s (70.0 m³/s) June 17, 1977, gage height, 6.81 ft (2.076 m); minimum daily, about 70 ft³/s (2.0 m³/s) Jan. 31 and Feb. 2, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,700 ft³/s (48.1 m³/s) June 1, gage height, 6.03 ft (1.838 m); minimum daily, about 220 ft³/s (6.2 m³/s) Mar. 1-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	650	942	845	755	550	220	320	1200	1600	671	493	890
2	622	912	830	755	500	220	320	1300	1600	650	474	845
3	587	882	792	755	450	220	320	1300	1600	636	448	800
4	587	882	792	741	450	220	340	1300	1560	622	434	748
5	566	905	800	727	450	220	340	1380	1520	601	422	713
6	566	875	845	706	400	240	340	1380	1460	587	409	671
7	552	838	852	685	400	240	360	1380	1410	573	403	643
8	538	815	882	650	400	240	360	1400	1330	566	409	615
9	519	792	875	650	350	240	380	1400	1190	559	441	580
10	500	860	868	622	350	240	380	1390	1090	538	441	559
11	493	845	852	601	350	260	400	1360	1070	526	422	538
12	474	845	815	566	300	260	400	1360	1040	506	454	519
13	454	830	792	587	300	260	420	1370	1030	493	573	493
14	441	808	741	601	300	280	440	1390	996	480	664	460
15	441	755	700	622	280	280	460	1420	1000	474	762	454
16	486	713	680	615	280	280	480	1460	988	454	882	460
17	559	685	660	594	280	260	500	1510	980	448	920	428
18	650	671	640	566	260	260	520	1520	950	428	1010	409
19	699	706	620	550	260	260	550	1540	928	415	1310	422
20	699	727	600	560	260	260	580	1550	905	397	1480	434
21	706	785	600	594	260	240	600	1570	875	385	1520	441
22	692	792	600	580	240	240	640	1570	845	391	1500	454
23	713	792	600	573	240	260	680	1580	822	422	1440	474
24	770	770	600	566	240	260	720	1600	800	486	1360	454
25	830	770	620	560	240	260	780	1600	792	552	1310	480
26	845	808	640	550	240	280	840	1590	762	580	1230	532
27	830	830	660	550	240	280	940	1590	741	566	1170	545
28	845	830	680	550	240	280	1100	1600	720	559	1100	552
29	898	815	720	600	---	300	1100	1620	678	538	1040	566
30	928	808	740	600	---	300	1200	1620	678	526	988	566
31	942	---	755	550	---	300	---	1610	---	506	942	---
TOTAL	20082	24288	22696	19181	9110	7960	16810	45460	31960	16135	26451	16745
MEAN	648	810	732	619	325	257	560	1466	1065	520	853	558
MAX	942	942	882	755	550	300	1200	1620	1600	671	1520	890
MIN	441	671	600	550	240	220	320	1200	678	385	403	409
CFSM	5.74	7.17	6.48	5.48	2.88	2.27	4.96	13.0	9.43	4.60	7.55	4.94
IN.	6.61	8.00	7.47	6.31	3.00	2.62	5.53	14.97	10.52	5.31	8.71	5.51
AC-FT	39830	48180	45020	38050	18070	15790	33340	90170	63390	32000	52470	33210

CAL YR 1978 TOTAL 209963 MEAN 575 MAX 1360 MIN 100 CFSM 5.09 IN 69.12 AC-FT 416500
WTR YR 1979 TOTAL 256878 MEAN 704 MAX 1620 MIN 220 CFSM 6.23 IN 84.56 AC-FT 509500

15303150 SNAKE RIVER NEAR DILLINGHAM--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1974 to July 1976, October 1976 to November 1977, April and May 1978, and January to September 1979 (discontinued).

INSTRUMENTATION.--Temperature recorder since Aug. 22, 1974.

REMARKS.--No record prior to Jan. 16 due to recorder malfunction. Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by temperature cross sections on May 24 and July 17. A maximum variation of 0.5°C was found within the sections.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES (water years 1974-77 and 1979): Maximum, 18.5°C July 19, 1979, minimum, 0.0°C on many days during winter periods most years.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 18.5°C July 19; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)
MAY					
24...	1510	203	--	1630	--
24...	1511	--	23	--	4.7
24...	1512	--	73	--	4.2
24...	1513	--	123	--	4.2
24...	1514	--	153	--	4.2
24...	1515	--	183	--	5.2
JUL					
17...	2020	191	--	447	--
17...	2021	--	20	--	18.8
17...	2022	--	40	--	17.8
17...	2023	--	60	--	17.1
17...	2024	--	80	--	16.8
17...	2025	--	100	--	16.6
17...	2026	--	120	--	16.3
17...	2027	--	140	--	16.5
17...	2028	--	160	--	16.6
17...	2029	--	180	--	17.1
17...	2030	--	200	--	18.0

15303150 SNAKE RIVER NEAR DILLINGHAM--Continued

TEMPERATURE (DEG. C) OF WATER, JANUARY TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1							---	---	.5	.5	---	---
2							---	---	.5	.0	---	---
3							---	---	.0	.0	---	---
4							---	---	.0	.0	---	---
5							---	---	.0	.0	---	---
6							---	---	.0	.0	---	---
7							---	---	.0	.0	---	---
8							---	---	.0	.0	.0	.0
9							---	---	.0	.0	.0	.0
10							---	---	.0	.0	.0	.0
11							---	---	.0	.0	.0	.0
12							---	---	.0	.0	.5	.0
13							---	---	.0	.0	.5	.0
14							---	---	.0	.0	1.0	.5
15							---	---	.0	.0	1.0	.5
16							---	---	.0	.0	1.0	.5
17							1.0	1.0	---	---	1.0	.5
18							1.0	.0	---	---	.5	.5
19							.0	.0	---	---	1.0	.5
20							.0	.0	---	---	1.0	.5
21							1.0	.0	---	---	1.0	1.0
22							1.0	1.0	---	---	1.0	1.0
23							1.0	1.0	---	---	1.0	.5
24							1.0	.0	---	---	1.0	.5
25							.5	.0	---	---	1.0	1.0
26							.5	.5	---	---	1.0	1.0
27							.5	.0	---	---	1.5	1.0
28							.0	.0	---	---	1.5	1.0
29							.0	.0	---	---	1.5	1.0
30							.0	.0	---	---	1.0	1.0
31							.5	.0	---	---	1.5	1.0
MONTH								.0		.0	1.5	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1.0	1.0	1.5	1.5	5.0	4.5	10.0	6.5	16.5	14.0	14.0	12.0
2	1.0	1.0	3.0	1.5	5.0	4.0	9.5	8.0	16.0	14.0	13.5	12.0
3	1.0	1.0	1.5	.0	5.0	4.0	9.0	9.0	17.0	14.0	13.0	11.0
4	1.0	1.0	1.5	.5	5.5	4.0	12.0	8.5	13.5	12.0	13.5	10.5
5	1.5	1.0	1.5	1.0	6.5	4.5	10.5	9.0	12.5	11.0	13.5	11.5
6	2.0	1.0	1.5	1.0	6.0	5.0	10.0	8.5	12.0	11.0	13.5	11.5
7	2.0	1.0	2.0	.5	6.0	4.5	11.5	7.5	13.5	12.0	13.5	12.0
8	2.0	1.0	3.0	1.5	7.5	4.5	10.0	9.0	14.0	12.5	14.5	12.5
9	2.0	1.5	3.0	2.5	7.0	6.0	13.0	9.5	14.0	12.5	14.5	12.5
10	1.5	1.0	3.0	1.5	6.5	5.5	13.0	10.0	14.5	13.0	14.5	12.5
11	2.0	1.0	3.0	2.5	6.0	5.0	14.5	12.0	14.0	12.5	13.5	12.5
12	2.0	1.5	3.5	2.5	6.5	5.0	16.5	12.5	12.5	6.0	14.0	12.5
13	2.5	1.5	5.0	3.0	7.5	5.5	14.0	12.0	11.0	6.0	15.0	13.0
14	2.5	1.5	4.0	2.5	7.0	5.5	16.0	12.0	11.0	8.0	13.5	12.5
15	2.0	1.5	4.0	3.0	6.0	5.5	16.0	14.0	10.0	5.5	12.5	12.0
16	1.5	1.5	3.0	3.0	6.0	5.0	17.0	11.0	12.5	10.0	12.0	10.5
17	1.5	1.5	5.0	3.0	5.5	4.5	18.0	11.0	12.0	11.0	12.5	9.5
18	2.5	1.5	5.0	4.0	5.5	4.5	18.0	16.0	11.0	7.5	12.0	10.5
19	2.0	1.5	4.5	3.0	5.5	5.0	18.5	15.0	7.5	5.0	11.5	8.5
20	2.0	1.5	3.0	3.0	8.5	4.5	17.0	13.0	10.0	5.0	11.0	10.5
21	2.0	1.5	3.5	3.0	8.0	6.0	14.5	12.5	11.5	9.0	10.5	9.5
22	3.0	1.5	3.5	3.0	8.0	5.5	12.5	10.0	13.0	10.5	9.5	9.0
23	2.0	1.0	3.5	3.0	6.5	5.5	10.0	7.0	13.0	11.5	10.5	9.0
24	2.5	1.0	6.0	3.5	6.0	5.0	13.0	6.0	13.0	11.5	9.5	8.0
25	3.0	1.5	6.5	5.5	6.0	4.5	14.0	11.0	12.5	11.0	9.5	5.5
26	1.5	1.5	8.0	5.5	7.0	5.0	14.0	12.5	11.5	10.5	8.5	5.5
27	1.5	1.5	8.0	6.0	9.5	6.0	16.0	13.0	13.5	10.5	9.0	8.0
28	1.5	1.5	7.0	6.0	11.5	7.0	16.0	13.5	13.0	12.0	8.5	8.0
29	2.5	1.5	6.0	4.5	10.0	8.0	14.5	14.0	13.0	12.0	9.0	8.5
30	2.0	1.5	6.0	5.0	8.5	6.5	17.0	14.0	12.5	12.0	9.0	8.0
31	---	---	5.5	4.0	---	---	16.0	14.0	12.5	12.0	---	---
MONTH	3.0	1.0	8.0	.0	11.5	4.0	18.5	6.0	17.0	5.0	15.0	5.5
YEAR	18.5	.0										

15304000 KUSKOKWIM RIVER AT CROOKED CREEK

(National stream-quality accounting and radiochemical networks station)

LOCATION.--Lat 61°52'16", long 158°06'03", in NE¼NE¼ sec.32, T.21 N., R.48 W., Hydrologic Unit 19040001, on right bank at village of Crooked Creek, 0.5 mi (0.8 km) upstream from Crooked Creek.

DRAINAGE AREA.--31,100 mi² (80,500 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 200 ft (61 m), from topographic map. Prior to Aug. 6, 1977, nonrecording gage at site 600 ft (180 m) downstream at same datum.

REMARKS.--Water-discharge records poor for period of no gage-height record prior to June 4, good thereafter.

AVERAGE DISCHARGE.--28 years, 41,150 ft³/s (1,165 m³/s), 17.97 in/yr (456 mm/yr), 29,810,000 acre-ft/yr (36.8 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 392,000 ft³/s (11,100 m³/s) June 5, 1964, gage height, 25.74 ft (7.846 m); maximum gage height, 26.36 ft (8.034 m) about May 16, 1968, from floodmarks, backwater from ice; minimum daily discharge, about 6,100 ft³/s (170 m³/s) Mar. 1-31, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 102,000 ft³/s (2,890 m³/s) about May 8, gage height, 9.95 ft (3.033 m), from floodmarks; minimum daily, about 10,000 ft³/s (280 m³/s) Mar. 6 to Apr. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32000	16000	12000	11000	11000	11000	10000	55000	90000	66000	70000	49900
2	30000	16000	12000	11000	11000	11000	10000	70000	88000	62700	68000	48000
3	30000	16000	12000	11000	11000	11000	10000	80000	88000	59600	68000	46200
4	30000	16000	12000	11000	11000	11000	10000	90000	88000	57500	70000	44900
5	28000	16000	12000	11000	11000	11000	10000	90000	88300	58200	74000	43400
6	28000	14000	12000	11000	11000	10000	10000	95000	86500	65000	72000	41700
7	28000	14000	12000	11000	11000	10000	10000	95000	83200	73300	72000	40000
8	26000	14000	12000	11000	11000	10000	10000	100000	80100	81200	76000	38800
9	26000	14000	12000	11000	11000	10000	10000	100000	77100	88100	74000	38200
10	26000	14000	12000	11000	11000	10000	10000	100000	74100	91600	72000	37000
11	24000	14000	12000	11000	11000	10000	10000	100000	71400	94100	72000	36100
12	24000	14000	12000	11000	11000	10000	10000	100000	70100	92800	72000	35400
13	24000	14000	12000	11000	11000	10000	10000	100000	70300	88700	70000	34900
14	22000	14000	12000	11000	11000	10000	10000	100000	71100	86000	70000	34600
15	22000	14000	12000	11000	11000	10000	10000	100000	70800	83700	72000	34400
16	22000	14000	12000	11000	11000	10000	11000	100000	71900	81300	76000	34400
17	22000	14000	12000	11000	11000	10000	11000	100000	72000	78700	74000	35900
18	20000	14000	12000	11000	11000	10000	11000	100000	73400	76800	74000	38000
19	20000	14000	12000	11000	11000	10000	11000	95000	74600	74400	78000	40200
20	20000	14000	12000	11000	11000	10000	12000	95000	72900	71800	74000	43200
21	20000	14000	12000	11000	11000	10000	12000	95000	71300	69600	70000	44500
22	20000	14000	12000	11000	11000	10000	13000	95000	70000	67100	69200	45000
23	20000	14000	12000	11000	11000	10000	15000	95000	67800	66100	69100	45600
24	18000	12000	12000	11000	11000	10000	17000	95000	65600	66200	65400	45700
25	18000	12000	12000	11000	11000	10000	20000	95000	64600	68100	62300	45900
26	18000	12000	12000	11000	11000	10000	23000	90000	65500	71300	59500	46400
27	18000	12000	12000	11000	11000	10000	28000	90000	67300	77200	56600	47000
28	18000	12000	12000	11000	11000	10000	35000	90000	69000	76800	54300	46500
29	16000	12000	12000	11000	---	10000	40000	90000	70100	73300	52000	46000
30	16000	12000	12000	11000	---	10000	46000	90000	69000	72300	51000	46000
31	16000	---	12000	11000	---	10000	---	90000	---	72000	50400	---
TOTAL	702000	416000	372000	341000	308000	315000	455000	2880000	2242000	2311500	2107800	1253800
MEAN	22650	13870	12000	11000	11000	10160	15170	92900	74730	74560	67990	41790
MAX	32000	16000	12000	11000	11000	11000	46000	100000	90000	94100	78000	49900
MIN	16000	12000	12000	11000	11000	10000	10000	55000	64600	57500	50400	34400
CFSM	.73	.45	.39	.35	.35	.33	.49	2.99	2.40	2.40	2.19	1.34
IN.	.84	.50	.44	.41	.37	.38	.54	3.44	2.68	2.76	2.52	1.50
AC-FT	1392000	825100	737900	676400	610900	624800	902500	5712000	4447000	4585000	4181000	2487000

CAL YR 1978 TOTAL 9792000 MEAN 26830 MAX 72300 MIN 9600 CFSM .86 IN 11.71 AC-FT 19420000
WTR YR 1979 TOTAL 13704100 MEAN 37550 MAX 100000 MIN 10000 CFSM 1.21 IN 16.39 AC-FT 27180000

15304000 KUSKOKWIM RIVER AT CROOKED CREEK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951, 1955-72, 1974 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: May 1957 to July 1967 (once-daily readings during open-water season) and July 1977 to current year (seasonal).

INSTRUMENTATION.--Temperature recorder since July 20, 1977.

REMARKS.--No record Aug. 18 to Sept. 30 due to lack of film in recorder. Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by temperature cross sections June 5 and Aug. 22. A maximum variation of 0.5°C was found within the cross sections.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 20.0°C July 28, 1959, June 22, 1960, July 15, 1961; minimum, 0.0°C during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 16.0°C July 21 and 22; minimum, 0.0°C during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SAMP-LING DEPTH (FT)	DEPTH AT SAMPLE LOC-ATION, TOTAL (FEET)	STREAM VELOC-ITY, POINT (FPS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
FEB								
26...	1601	700	--	--	--	259	7.0	.0
26...	1602	550	--	--	--	248	7.0	.0
26...	1603	400	--	--	--	230	7.0	.0
JUN								
05...	1302	1100	--	12.0	3.70	145	7.2	--
05...	1303	1100	2.4	12.0	4.50	--	--	12.1
05...	1304	1100	7.2	12.0	--	--	--	12.1
05...	1305	1100	9.6	12.0	2.90	--	--	12.3
05...	1307	950	--	26.0	E4.10	145	7.2	--
05...	1308	950	5.2	26.0	E4.80	145	7.2	12.2
05...	1309	950	16	26.0	--	145	7.2	12.2
05...	1310	950	21	26.0	E3.40	145	7.3	12.2
05...	1312	900	--	30.0	4.00	140	7.3	--
05...	1313	900	6.0	30.0	4.80	--	--	12.2
05...	1314	900	18	30.0	--	--	--	12.2
05...	1315	900	24	30.0	3.10	--	--	12.2
05...	1317	825	--	32.0	5.00	140	7.2	--
05...	1318	825	6.4	32.0	5.60	--	--	12.2
05...	1319	825	19	32.0	--	--	--	12.2
05...	1320	825	26	32.0	4.40	--	--	12.2
05...	1322	775	--	30.0	4.70	130	7.2	--
05...	1323	775	6.0	30.0	5.60	--	--	12.1
05...	1324	775	18	30.0	--	--	--	12.1
05...	1325	775	24	30.0	3.80	--	--	12.1
05...	1327	700	--	26.0	5.50	125	7.3	--
05...	1328	700	5.2	26.0	6.00	125	7.2	11.9
05...	1329	700	16	26.0	--	130	7.2	12.0
05...	1330	700	22	26.0	5.00	130	7.4	12.0
05...	1332	650	--	24.0	E5.00	122	7.2	--
05...	1333	650	4.8	24.0	E6.10	--	--	11.9
05...	1334	650	14	24.0	--	--	--	11.9
05...	1335	650	19	24.0	E3.90	--	--	11.9
05...	1337	550	--	19.0	5.00	110	7.1	--
05...	1338	550	3.8	19.0	5.60	110	7.0	11.7
05...	1339	550	11	19.0	--	109	7.2	11.7
05...	1340	550	15	19.0	4.40	110	7.0	11.7
05...	1342	450	--	14.0	4.40	107	7.0	--
05...	1343	450	2.9	14.0	5.20	--	--	11.6
05...	1344	450	8.7	14.0	--	--	--	11.6
05...	1345	450	12	14.0	3.50	--	--	11.6
05...	1347	300	--	9.30	3.60	105	7.0	--
05...	1348	300	1.8	9.30	3.90	--	--	11.5
05...	1349	300	5.1	9.30	--	--	--	11.5
05...	1350	300	7.2	9.30	3.30	--	--	11.5
AUG								
22...	1601	475	--	--	--	150	7.4	13.0
22...	1602	650	--	--	--	160	7.4	13.0
22...	1603	775	--	--	--	170	7.5	13.1
22...	1604	875	--	--	--	180	7.7	13.1
22...	1605	1050	--	--	--	183	7.5	13.1

E ESTIMATED

15304000 KUSKOKWIM RIVER AT CROOKED CREEK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	SEDI-MENT, SUS-PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
FEB								
26...	4.7	--	--	--	--	--	--	--
26...	4.8	--	--	--	--	--	--	--
26...	4.4	--	--	--	--	--	--	--
JUN								
05...	--	--	84	0	12	2000	40	36
05...	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--
05...	--	--	76	0	12	2300	60	47
05...	--	--	72	0	12	2400	42	39
05...	--	--	74	0	13	2400	50	28
05...	--	--	76	0	13	2400	69	37
05...	--	--	76	0	11	2300	48	35
05...	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--
05...	--	--	74	0	14	2700	71	28
05...	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--
05...	--	--	68	0	11	3000	85	29
05...	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--
05...	--	--	64	0	10	2300	123	18
05...	--	--	64	0	12	2500	81	33
05...	--	--	68	0	12	2800	136	19
05...	--	--	66	0	12	3000	167	16
05...	--	--	66	0	10	400	110	26
05...	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--
05...	--	--	66	0	9.9	2900	126	23
05...	--	--	60	0	11	2600	74	32
05...	--	--	66	0	12	2700	137	21
05...	--	--	60	0	12	2800	157	11
05...	--	--	64	0	8.8	2500	86	17
05...	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--
05...	--	--	64	0	8.6	1900	52	33
05...	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--
AUG								
22...	10.5	101	--	--	--	--	--	--
22...	10.5	101	--	--	--	--	--	--
22...	10.5	101	--	--	--	--	--	--
22...	10.5	101	--	--	--	--	--	--
22...	10.5	101	--	--	--	--	--	--

DATE	TIME	STREAM WIDTH (FT)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
FEB												
26...	1600	975	10700	1.9	--	<1	<1	130	18	39	8.5	2.0
JUN												
05...	1300	1240	88600	16	750	K9	<1	62	22	18	4.1	1.5
AUG												
22...	1600	--	68500	96	760	K35	K7	80	16	23	5.5	1.8

K NON-IDEAL COLONY COUNT

15304000 KUSKOKWIM RIVER AT CROOKED CREEK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)
FEB 26...	.7	136	0	19	.7	.2	13	199	143	.26	.01	.07
JUN 05...	.7	--	--	11	3.9	.1	6.9	82	70	.12	.02	.44
AUG 22...	.8	78	0	20	.5	.2	7.4	98	97	.06	.00	.59

DATE	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)
FEB 26...	.08	.01	.07	.34	.04	.01	1	1	0	0	0	0
JUN 05...	.46	.00	.74	.58	.06	.01	5	2	100	100	0	1
AUG 22...	.59	.02	.57	.65	.17	.00	5	1	300	300	50	1

DATE	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
FEB 26...	0	1	20	10	10	2	2	0	5	4	1	480
JUN 05...	0	1	20	10	10	1	1	0	13	12	1	3700
AUG 22...	0	<1	30	30	0	7	4	<3	14	12	2	12000

DATE	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)
FEB 26...	400	80	--	--	--	30	20	10	.1	.1	.0	1
JUN 05...	3500	160	13	13	0	100	100	0	.1	.1	.0	1
AUG 22...	12000	60	8	8	0	240	240	5	.1	.1	.0	1

DATE	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, DISSOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)
FEB 26...	0	1	0	0	0	20	10	10	<2.1	--	<.4	--
JUN 05...	1	0	0	0	0	50	20	30	<1.0	<.7	3.3	2.2
AUG 22...	1	0	0	0	0	40	40	<3	--	--	--	--

15304000 KUSKOKWIM RIVER AT CROOKED CREEK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
FEB 26...	<.9	<.4	<.8	<.4	.04	.50	2.5	.2	1	29	--
JUN 05...	.7	2.0	.6	1.9	.05	.22	--	--	81	19400	27
AUG 22...	--	--	--	--	--	--	3.3	1.1	284	52500	62

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO AUGUST 1979

	FEB 26,79	JUN 5,79	AUG 22,79
DATE	FEB 26,79	JUN 5,79	AUG 22,79
TIME	1600	1300	1600
TOTAL CELLS/ML	0	740	100
DIVERSITY: DIVISION	0.0	1.5	1.1
.CLASS	0.0	1.5	1.1
..ORDER	0.0	2.1	1.8
...FAMILY	0.0	2.3	1.8
....GENUS	0.0	2.5	1.8

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...SCENEDESMACEAE						
....SCENEDESMUS	--	-	78	11	--	-
....TETRASTRUM	--	-	52	7	--	-
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	--	-	13	2	14	14
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	--	-	100	14	--	-
....MELOSIRA	--	-	--	-	29#	29
..PENNALES						
...FRAGILARIACEAE						
....ASTERIONELLA	--	-	52	7	--	-
...NITZSCHIACEAE						
....NITZSCHIA	--	-	78	11	43#	43
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROOCOCCALES						
...CHROOCOCCACEAE						
....ANACYSTIS	--	-	39	5	--	-
..HORMOGONALES						
...OSCILLATORIACEAE						
....OSCILLATORIA	--	-	320#	44	--	-
EUGLENOPHYTA (EUGLENOIDS)						
.EUGLENOPHYCEAE						
..EUGLENALES						
...EUGLENACEAE						
....TRACHELOMONAS	--	-	--	-	14	14

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

15304000 KUSKOKWIM RIVER AT CROOKED CREEK--Continued

TEMPERATURE (DEG. C) OF WATER, JUNE TO AUGUST 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	12.0	12.0	12.0	13.5	13.0	13.0			
2	---	---	---	12.5	12.0	12.0	14.0	13.5	14.0			
3	---	---	---	13.0	12.5	13.0	15.0	14.0	14.5			
4	---	---	---	13.0	13.0	13.0	15.0	14.5	15.0			
5	12.0	12.0	12.0	13.0	12.0	12.5	15.0	14.5	15.0			
6	12.5	12.0	12.0	12.0	10.5	11.0	14.5	13.5	14.0			
7	12.5	12.0	12.0	10.5	10.0	10.0	13.5	13.0	13.0			
8	12.5	12.0	12.0	11.0	10.0	10.5	13.0	13.0	13.0			
9	12.0	12.0	12.0	12.0	11.0	11.5	13.5	13.0	13.0			
10	12.0	11.5	12.0	12.0	11.0	11.5	13.5	13.5	13.5			
11	11.5	11.0	11.0	11.5	11.0	11.0	13.5	13.0	13.0			
12	11.0	10.0	10.5	12.5	11.5	12.0	13.5	13.0	13.0			
13	10.0	10.0	10.0	13.0	12.5	13.0	13.0	13.0	13.0			
14	10.0	10.0	10.0	14.0	13.0	13.5	13.0	13.0	13.0			
15	10.0	10.0	10.0	15.0	14.0	14.5	13.0	12.5	13.0			
16	10.0	10.0	10.0	15.0	15.0	15.0	12.5	12.0	12.0			
17	10.0	10.0	10.0	15.0	15.0	15.0	12.0	11.5	12.0			
18	10.0	9.5	10.0	15.0	15.0	15.0	---	---	---			
19	9.5	9.0	9.0	15.0	14.5	15.0	---	---	---			
20	9.5	9.0	9.0	15.0	15.0	15.0	---	---	---			
21	10.0	9.5	10.0	16.0	15.0	15.5	---	---	---			
22	11.5	10.5	11.0	16.0	15.5	16.0	---	---	---			
23	13.0	11.5	12.0	15.5	14.5	15.0	---	---	---			
24	13.0	13.0	13.0	14.5	14.0	14.0	---	---	---			
25	13.0	12.0	12.5	13.5	13.0	13.0	---	---	---			
26	12.0	11.0	11.5	14.0	13.0	13.5	---	---	---			
27	11.0	11.0	11.0	14.0	14.0	14.0	---	---	---			
28	11.0	10.5	11.0	14.0	13.5	14.0	---	---	---			
29	12.0	11.0	11.5	14.0	14.0	14.0	---	---	---			
30	12.0	12.0	12.0	14.0	14.0	14.0	---	---	---			
31	---	---	---	14.0	13.5	14.0	---	---	---			
				16.0	10.0	13.5						

15348000 FORTYMILE RIVER NEAR STEELE CREEK

LOCATION.--Lat 64°18'33", long 141°24'08", in SE¼NW¼ sec.16, T.7 S., R.32 E., Hydrologic Unit 19030001, on left bank 300 ft (91 m) downstream from bridge at mile 112.9 (181.7 km) on Taylor Highway, 0.3 mi (0.5 km) downstream from O'Brien Creek, 0.7 mi (1.1 km) southeast of Alaska Department of Highways road camp, and 4.4 mi (7.1 km) northwest of Steele Creek.

DRAINAGE AREA.--5,880 mi² (15,200 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1910 to October 1912, published as "at Steele Creek" (no winter records), October 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,200.00 ft (365.760 m) National Geodetic Vertical Datum of 1929 (Alaska Department of Highways temporary bench mark). Prior to Oct. 16, 1912 at site 6.8 mi (10.9 km) downstream at different datum.

REMARKS.--Records fair except those for period of missing record, Oct. 14 to Apr. 29, which are estimated and poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 72,000 ft³/s (2,040 m³/s) May 3, 1979, gage height, 92.4 ft (28.16 m) from floodmarks, from rating curve extended above 24,000 ft³/s (680 m³/s); no flow during winter period in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1964 reached a stage of 34.5 ft (10.52 m), from floodmarks, at previous Taylor Highway bridge and at different datum; discharge, 84,000 ft³/s (2,380 m³/s), from rating curve extended above 43,000 ft³/s (1,220 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 72,000 ft³/s (2,040 m³/s) May 3, gage height, 92.4 ft (28.16 m), from floodmarks, from rating curve extended above 24,000 ft³/s (680 m³/s); no flow Feb. 1 to Apr. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1760	320	150	40	.00	.00	.00	28900	5190	5230	11100	15100
2	1540	310	140	40	.00	.00	.00	48500	4710	4710	14900	11800
3	1350	300	140	40	.00	.00	.00	61000	7840	4410	15500	18000
4	1160	300	140	40	.00	.00	.00	54600	8580	3490	12300	28400
5	1120	290	130	40	.00	.00	.00	47600	6040	2800	9490	22700
6	1120	280	130	30	.00	.00	.00	41700	4750	2690	8720	23300
7	1130	270	130	30	.00	.00	.00	31400	4240	3730	8610	19000
8	1070	270	120	30	.00	.00	.00	17700	4320	4300	7520	15600
9	1070	260	120	30	.00	.00	.00	12400	4890	3760	6270	13000
10	1080	260	120	30	.00	.00	.00	10300	5140	3840	5250	11000
11	1010	250	110	20	.00	.00	.00	9600	5870	3590	4540	9350
12	914	240	110	20	.00	.00	.00	11600	7000	3020	3990	8170
13	764	240	100	20	.00	.00	.00	13600	5640	2760	3570	7560
14	700	230	100	20	.00	.00	.00	13700	4730	2380	3360	7670
15	640	230	100	20	.00	.00	.00	13100	4180	3020	3100	7060
16	600	220	90	10	.00	.00	.00	13100	3700	4420	2900	6400
17	550	220	90	10	.00	.00	.00	12800	3140	5070	2950	5910
18	520	210	90	10	.00	.00	.00	11900	3650	4580	4130	5910
19	480	210	90	10	.00	.00	.00	10800	5780	4760	7730	5590
20	460	200	80	10	.00	.00	.00	8360	6820	5340	5680	5270
21	440	200	80	10	.00	.00	.00	7210	7800	4870	4830	4980
22	420	190	80	10	.00	.00	.00	6800	8410	5620	4360	4940
23	410	180	70	10	.00	.00	.00	6800	7060	9350	3830	4680
24	400	180	70	10	.00	.00	.00	7230	5450	8740	3420	4370
25	390	170	70	10	.00	.00	.00	10000	4270	6210	3100	4040
26	370	170	60	5.0	.00	.00	5.0	11100	3440	8210	2820	3780
27	360	160	60	5.0	.00	.00	100	10300	3140	18000	2650	3500
28	350	160	60	5.0	.00	.00	1000	9850	2830	15800	2540	3200
29	340	150	50	5.0	---	.00	7000	7820	4440	11600	2480	3000
30	330	150	50	5.0	---	.00	21600	7020	6000	8650	2920	2800
31	320	---	50	5.0	---	.00	---	6740	---	7080	11900	---
TOTAL	23160	6820	2980	580.0	.00	.00	29705.00	563530	159050	182030	186460	286080
MEAN	747	227	96.1	18.7	.000	.000	990	18180	5302	5872	6015	9536
MAX	1760	320	150	40	.00	.00	21600	61000	8580	18000	15500	28400
MIN	320	150	50	5.0	.00	.00	.00	6740	2830	2380	2480	2800
CFSM	.13	.04	.02	.003	.000	.000	.17	3.09	.90	1.00	1.02	1.62
IN.	.15	.04	.02	.00	.00	.00	.19	3.57	1.01	1.15	1.18	1.81
AC-FT	45950	13530	5910	1150	.00	.00	58920	1118000	315500	361100	369800	567400

CAL YR 1978 TOTAL 661675.00 MEAN 1813 MAX 21000 MIN .00 CFSM .31 IN 4.19 AC-FT 1312000
WTR YR 1979 TOTAL 1440403.00 MEAN 3946 MAX 61000 MIN .00 CFSM .67 IN 9.11 AC-FT 2857000

15348000 FORTYMILE RIVER NEAR STEELE CREEK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1953-57, 1959, 1976, and 1979.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	BICAR-BONATE (MG/L AS HCO3)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
MAY								
11...	0800	10100	80	7.0	2.5	27	13	355

15356000 YUKON RIVER AT EAGLE

LOCATION.--Lat 64°47'22", long 141°11'52", in NW¼ sec.31, T.1 S., R.33 E., Hydrologic Unit 19030002, on left bank at Eagle, 0.1 mi (0.2 km) upstream from Mission Creek, 1.1 mi (1.8 km) downstream from Castalia Creek, and 11 mi (18 km) downstream from the international boundary.

DRAINAGE AREA.--113,500 mi^2 (294,000 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1911 to December 1913, June 1950 to current year. Monthly discharge only for some periods, published in WSP 1372.

REVISED RECORDS.--WSP 1372: 1911-14. WSP 2136: 1957, 1964 (M).

GAGE.--Nonrecording gage read once or twice daily. Altitude of gage is 850 ft (260 m), from topographic map. See WSP 1936 for history of changes prior to Oct. 1, 1963.

REMARKS.--Records fair except those for period of no gage-height record, Oct. 8 to May 5, which are estimated and poor.

AVERAGE DISCHARGE.--31 years, 82,250 ft^3/s (2,329 m^3/s), 9.84 in/yr (250 mm/yr), 59,590,000 acre-ft/yr (73.5 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 545,000 ft^3/s (15,400 m^3/s) June 12, 1964, gage height, 33.85 ft (10.317 m); maximum gage height, 35.94 ft (10.955 m) in May 1962, from floodmarks, backwater from ice; minimum daily discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge observed, 295,000 ft^3/s (8,350 m^3/s) May 6, gage height, 23.2 ft (7.07 m); minimum daily, 20,000 ft^3/s (570 m^3/s) Mar. 6 to Apr. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74500	45000	28000	25000	23000	22000	20000	130000	224000	243000	229000	145000
2	74500	45000	28000	25000	23000	22000	20000	200000	227000	229000	233000	144000
3	73700	45000	28000	25000	23000	22000	20000	250000	235000	217000	244000	141000
4	72800	45000	28000	25000	23000	22000	20000	220000	252000	208000	252000	153000
5	72800	40000	28000	25000	23000	22000	20000	230000	264000	206000	252000	156000
6	72800	40000	28000	25000	23000	20000	20000	291000	266000	217000	246000	157000
7	72000	40000	27000	25000	23000	20000	20000	270000	266000	229000	243000	164000
8	70000	40000	27000	25000	23000	20000	20000	210000	268000	246000	237000	157000
9	70000	40000	27000	25000	23000	20000	20000	164000	274000	270000	227000	148000
10	70000	40000	27000	25000	23000	20000	20000	139000	279000	279000	220000	141000
11	68000	35000	27000	25000	23000	20000	20000	132000	276000	270000	215000	135000
12	68000	35000	27000	25000	23000	20000	20000	124000	274000	262000	210000	128000
13	66000	35000	27000	24000	23000	20000	20000	124000	268000	258000	205000	123000
14	66000	35000	27000	24000	23000	20000	20000	124000	260000	264000	198000	120000
15	64000	35000	27000	24000	23000	20000	20000	124000	254000	264000	193000	119000
16	62000	35000	27000	24000	23000	20000	20000	129000	248000	264000	186000	118000
17	60000	35000	27000	24000	22000	20000	20000	139000	243000	262000	180000	115000
18	60000	35000	27000	24000	22000	20000	21000	145000	231000	256000	175000	114000
19	58000	35000	26000	24000	22000	20000	22000	153000	220000	252000	170000	114000
20	58000	30000	26000	24000	22000	20000	23000	156000	213000	254000	167000	115000
21	56000	30000	26000	24000	22000	20000	24000	154000	210000	256000	162000	115000
22	54000	30000	26000	24000	22000	20000	25000	153000	213000	252000	159000	115000
23	52000	30000	26000	24000	22000	20000	27000	151000	220000	260000	154000	112000
24	52000	30000	26000	24000	22000	20000	29000	148000	226000	266000	150000	110000
25	52000	30000	26000	24000	22000	20000	32000	154000	235000	260000	145000	109000
26	52000	30000	26000	24000	22000	20000	35000	168000	243000	252000	141000	106000
27	52000	30000	26000	24000	22000	20000	40000	175000	246000	254000	140000	104000
28	45000	30000	26000	24000	22000	20000	47000	183000	246000	268000	140000	103000
29	45000	30000	26000	24000	---	20000	60000	193000	246000	266000	140000	100000
30	45000	30000	26000	23000	---	20000	86000	203000	246000	250000	139000	98800
31	45000	---	26000	23000	---	20000	---	217000	---	237000	137000	---
TOTAL	1903100	1065000	830000	754000	632000	630000	811000	5353000	7373000	7771000	5889000	3779800
MEAN	61390	35500	26770	24320	22570	20320	27030	172700	245800	250700	190000	126000
MAX	74500	45000	28000	25000	23000	22000	86000	291000	279000	279000	252000	164000
MIN	45000	30000	26000	23000	22000	20000	20000	124000	210000	206000	137000	98800
CFSM	.54	.31	.24	.21	.20	.18	.24	1.52	2.17	2.21	1.67	1.11
IN.	.62	.35	.27	.25	.21	.21	.27	1.75	2.42	2.55	1.93	1.24
AC-FT	3775000	2112000	1646000	1496000	1254000	1250000	1609000	10620000	14620000	15410000	11680000	7497000

CAL YR 1978 TOTAL 27387200 MEAN 75030 MAX 240000 MIN 16000 CFSM .66 IN 8.98 AC-FT 54320000
WTR YR 1979 TOTAL 36790900 MEAN 100800 MAX 291000 MIN 20000 CFSM .89 IN 12.06 AC-FT 72970000

15356000 YUKON RIVER AT EAGLE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950-57, 1962-70, 1974-76, 1978, and 1979.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)
MAR									
21...	1457	1120	130	--	210	7.8	.0	--	--
21...	1458	--	280	--	210	7.6	.0	--	--
21...	1459	--	330	--	--	--	--	--	9.5
21...	1500	--	380	20100	219	7.6	.0	.60	9.5
21...	1501	--	530	--	212	7.6	.0	--	--
21...	1502	--	730	--	215	7.6	.0	--	--
JUL									
19...	1700	--	--	243000	170	7.8	15.0	130	9.1

DATE	TIME	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)
MAR										
21...	1500	1	2	120	23	33	8.3	2.5	1.1	114
JUL										
19...	1700	44	15	84	7	23	6.5	2.4	7.2	94

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)
MAR										
21...	23	.6	.2	6.1	132	131	.21	.01	.01	.02
JUL										
19...	19	7.5	.2	6.9	132	119	.05	.17	4.1	4.3

DATE	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
MAR									
21...	.00	.02	.23	.000	.010	3.5	.2	2	109
JUL									
19...	3.7	.65	4.4	.500	.040	--	--	579	380000

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
MAR										
21...	1500	0	0	0	0	0	1	0	1	10

DATE	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)
MAR										
21...	10	0	0	0	0	31	31	0	80	70

15356000 YUKON RIVER AT EAGLE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, SUS- PENDED RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDED RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY SUS- PENDED RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)
MAR 21...	10	52	52	0	0	0	0	.0	.0	.0

DATE	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, SUS- PENDED TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, SUS- PENDED RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDED RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
MAR 21...	1	1	0	0	0	0	90	80	10

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCROBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO JULY 1979

DATE	MAR 21,79	JUL 19,79
TIME	1500	1700
TOTAL CELLS/ML	0	330
DIVERSITY: DIVISION	0.0	1.2
.CLASS	0.0	1.2
..ORDER	0.0	1.4
...FAMILY	0.0	2.5
....GENUS	0.0	2.8

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)				
.CHLOROPHYCEAE				
..CHLOROCOCCALES				
...OOCYSTACEAE				
....ANKISTRODESMUS	--	-	14	4
....OOCYSTIS	--	-	120#	38
..VOLVOCALES				
...CHLAMYDOMONADACEAE				
....CHLAMYDOMONAS	--	-	14	4
CHRYSOPHYTA				
.BACILLARIOPHYCEAE				
..PENNALES				
...FRAGILARIACEAE				
....SYNEDRA	--	-	41	13
...GOMPHONEMATACEAE				
....GOMPHONEMA	--	-	55#	17
...NAVICULACEAE				
....NAVICULA	--	-	14	4
....PINNULARIA	--	-	14	4
...NITZSCHIACEAE				
....NITZSCHIA	--	-	27	8
...TABELLARIACEAE				
....TABELLARIA	--	-	14	4
PYRRHOPHYTA (FIRE ALGAE)				
.DINOPHYCEAE				
..PERIDINIALES				
...GLENODINIACEAE				
....GLENODINIUM	--	-	14	4

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

15389000 PORCUPINE RIVER NEAR FORT YUKON

LOCATION.--Lat 66°59'26", long 143°08'16", Hydrologic Unit 19030002, on right bank 1,000 ft (300 m) upstream from John Herberts Village, and 65 mi (105 km) northeast of Fort Yukon.

DRAINAGE AREA.--29,500 mi^2 (76,400 km^2), approximately.

PERIOD OF RECORD.--August 1964 to September 1979 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 520 ft (160 m), from topographic map. Prior to Aug. 17, 1968, 1,300 ft (400 m) upstream at same datum.

REMARKS.--Records fair except those for period of no gage-height record, Oct. 4 to June 26, which are estimated and poor.

AVERAGE DISCHARGE.--15 years, 14,230 ft^3/s (403.0 m^3/s), 6.55 in/yr (166 mm/yr), 10,310,000 acre-ft/yr (12.7 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 299,000 ft^3/s (8,470 m^3/s) about May 24, 1973, gage height, 33.68 ft (10.266 m), from floodmarks, from rating curve extended above 180,000 ft^3/s (5,100 m^3/s); minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 121,000 ft^3/s (3,430 m^3/s) about May 20, gage height, 23.72 ft (7.230 m), from floodmarks; minimum daily, 780 ft^3/s (22.1 m^3/s) Mar. 26 to Apr. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17500	4400	2400	1500	1100	900	780	860	70000	24200	13100	12500
2	18700	4300	2300	1500	1100	900	780	880	64000	23200	31800	13100
3	18700	4200	2300	1500	1100	900	780	900	58000	22200	36000	14700
4	17000	4100	2300	1500	1100	900	780	950	52000	22800	32600	16300
5	15000	4000	2300	1400	1100	900	780	1000	48000	23100	29200	19600
6	14000	3900	2200	1400	1100	900	780	1000	44000	34000	27800	27200
7	13000	3800	2200	1400	1100	860	780	1100	40000	42800	28000	28900
8	12000	3700	2200	1400	1100	860	780	1200	35000	35600	30600	29600
9	11000	3600	2100	1400	1100	860	780	1400	30000	28000	32100	32600
10	10000	3500	2100	1400	1000	860	780	1600	27000	24100	37200	35200
11	9500	3400	2100	1400	1000	860	780	2000	24000	23100	42200	33000
12	9000	3300	2000	1300	1000	860	780	3500	22000	22500	40400	29300
13	8500	3200	2000	1300	1000	860	780	5000	20000	20000	36000	25500
14	8000	3100	2000	1300	1000	860	780	8000	18000	17700	31400	22500
15	7500	3000	1900	1300	1000	860	780	14000	19000	16000	27000	20300
16	7000	3000	1900	1300	1000	820	780	25000	20000	14500	23300	18700
17	6800	2900	1900	1300	1000	820	780	40000	23000	13400	20400	17200
18	6600	2900	1800	1300	1000	820	780	70000	26000	13400	18600	16100
19	6400	2800	1800	1200	1000	820	780	100000	24000	13800	17800	15500
20	6200	2800	1800	1200	1000	820	780	110000	21000	12600	17500	15400
21	6000	2700	1800	1200	1000	820	780	100000	19000	11700	17300	15500
22	5800	2700	1700	1200	1000	820	780	100000	17000	12600	17500	16600
23	5600	2600	1700	1200	1000	820	790	90000	18000	14300	17400	19700
24	5400	2600	1700	1200	1000	820	790	80000	19000	15300	17000	21400
25	5200	2500	1700	1200	900	820	800	70000	20000	18100	16800	21700
26	5000	2500	1600	1200	900	780	800	64000	22000	17100	15800	21700
27	4900	2500	1600	1200	900	780	820	58000	23700	14900	14900	21700
28	4800	2400	1600	1100	900	780	820	54000	22100	12700	14000	21600
29	4700	2400	1600	1100	---	780	830	52000	22200	11300	13400	20600
30	4600	2400	1600	1100	---	780	840	52000	24000	10400	12700	19600
31	4500	---	1500	1100	---	780	---	58000	---	9600	12500	---
TOTAL	278900	95200	59700	40100	28500	26020	23650	1166390	892000	595000	742300	643300
MEAN	8997	3173	1926	1294	1018	839	788	37630	29730	19190	23950	21440
MAX	18700	4400	2400	1500	1100	900	840	110000	70000	42800	42200	35200
MIN	4500	2400	1500	1100	900	780	780	860	17000	9600	12500	12500
CFSM	.31	.11	.07	.04	.04	.03	.03	1.28	1.01	.65	.81	.73
IN.	.35	.12	.08	.05	.04	.03	.03	1.47	1.12	.75	.94	.81
AC-FT	553200	188800	118400	79540	56530	51610	46910	2314000	1769000	1180000	1472000	1276000

CAL YR 1978 TOTAL 4181350 MEAN 11460 MAX 110000 MIN 480 CFSM .39 IN 5.27 AC-FT 8294000
WTR YR 1979 TOTAL 4591060 MEAN 12580 MAX 110000 MIN 780 CFSM .43 IN 5.79 AC-FT 9106000

15439800 BOULDER CREEK NEAR CENTRAL

LOCATION.--Lat 65°34'05", long 144°53'13", in NW¼ sec.32, T.9 N., R.14 E., Hydrologic Unit 19030002, on right bank, 2,000 ft (610 m) upstream from bridge at mile 125.4 (201.8 km) on Steese Highway, 0.7 mi (1.1 km) upstream from mouth, and 2.3 mi (3.7 km) west of Central.

DRAINAGE AREA.--31.3 mi^2 (81.1 km^2).

PERIOD OF RECORD.--Annual maximums, water years 1964-66. May 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,075 ft (328 m), from topographic map. Aug. 3, 1963 to May 22, 1966, crest-stage gage at upstream side of bridge 2,000 ft (610 m) downstream at different datum. May 23, 1966 to Sept. 27, 1969, water-stage recorder, on downstream side of bridge, at datum 7.02 ft (2.140 m) higher than previous datum. Sept. 28, 1969 to July 31, 1971, nonrecording gage on downstream side of bridge, datum of prior recording gage.

REMARKS.--Records fair except those for period of no gage-height record, Oct. 5 to Aug. 22, which are estimated and poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--13 years, 11.5 ft^3/s (0.326 m^3/s), 4.99 in/yr (127 mm/yr), 8,330 acre-ft/yr (10.3 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,150 ft^3/s (32.6 m^3/s) Aug. 13, 1967, gage height, 7.50 ft (2.286 m), site and datum then in use, 9.72 ft (2.963 m), from floodmarks at present site and datum, from rating curve extended above 70 ft^3/s (2.0 m^3/s) on the basis of slope-area measurement of peak flow; no flow at times during winter periods.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 125 ft^3/s (3.54 m^3/s) about July 1, gage height, 6.10 ft (1.859 m), from range-line on recorder chart, but may have been higher during period of no gage-height record in May; no flow Nov. 23 to Apr. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	.50	.00	.00	.00	.00	.00	40	18	120	15	6.8
2	8.0	.50	.00	.00	.00	.00	.00	60	16	80	12	7.3
3	6.3	.50	.00	.00	.00	.00	.00	80	14	50	9.0	9.2
4	5.2	.50	.00	.00	.00	.00	.00	100	12	30	7.0	16
5	4.6	.40	.00	.00	.00	.00	.00	110	10	20	10	45
6	4.0	.40	.00	.00	.00	.00	.00	110	9.0	18	25	53
7	3.5	.40	.00	.00	.00	.00	.00	100	8.0	22	30	43
8	3.1	.40	.00	.00	.00	.00	.00	90	7.0	20	40	35
9	2.8	.40	.00	.00	.00	.00	.00	60	6.0	30	60	28
10	2.6	.30	.00	.00	.00	.00	.00	45	5.0	50	40	24
11	2.3	.30	.00	.00	.00	.00	.00	40	5.0	80	20	21
12	2.1	.30	.00	.00	.00	.00	.00	35	4.0	90	15	18
13	1.9	.30	.00	.00	.00	.00	.00	30	4.0	60	11	17
14	1.7	.30	.00	.00	.00	.00	.00	25	5.0	30	10	16
15	1.6	.30	.00	.00	.00	.00	.00	25	7.0	20	8.0	14
16	1.5	.20	.00	.00	.00	.00	.00	28	6.0	18	6.0	26
17	1.4	.20	.00	.00	.00	.00	.00	35	5.0	15	5.0	57
18	1.3	.20	.00	.00	.00	.00	.00	38	4.0	12	4.0	47
19	1.2	.20	.00	.00	.00	.00	.00	45	4.0	10	3.0	40
20	1.1	.20	.00	.00	.00	.00	.00	50	3.0	14	4.0	51
21	1.0	.10	.00	.00	.00	.00	.00	60	3.0	12	5.0	50
22	1.0	.10	.00	.00	.00	.00	.00	68	5.0	16	4.5	42
23	.90	.00	.00	.00	.00	.00	.00	74	7.0	13	4.2	34
24	.80	.00	.00	.00	.00	.00	.00	80	5.0	10	4.0	29
25	.80	.00	.00	.00	.00	.00	.00	85	4.0	15	3.6	26
26	.80	.00	.00	.00	.00	.00	1.0	90	10	30	3.6	24
27	.70	.00	.00	.00	.00	.00	2.0	70	20	50	3.6	20
28	.70	.00	.00	.00	.00	.00	5.0	50	50	40	3.6	18
29	.70	.00	.00	.00	---	.00	10	40	100	25	3.6	16
30	.60	.00	.00	.00	---	.00	20	30	110	15	4.6	15
31	.60	---	.00	.00	---	.00	---	25	---	10	5.8	---
TOTAL	77.80	7.00	.00	.00	.00	.00	38.00	1818	466.0	1025	380.1	848.3
MEAN	2.51	.23	.000	.000	.000	.000	1.27	58.6	15.5	33.1	12.3	28.3
MAX	13	.50	.00	.00	.00	.00	20	110	110	120	60	57
MIN	.60	.00	.00	.00	.00	.00	.00	25	3.0	10	3.0	6.8
CFSM	.08	.007	.000	.000	.000	.000	.04	1.87	.50	1.06	.39	.90
IN.	.09	.01	.00	.00	.00	.00	.05	2.16	.55	1.22	.45	1.01
AC-FT	154	14	.00	.00	.00	.00	75	3610	924	2030	754	1680

CAL YR 1978 TOTAL 4217.40 MEAN 11.6 MAX 92 MIN .00 CFSM .37 IN 5.01 AC-FT 8370
WTR YR 1979 TOTAL 4660.20 MEAN 12.8 MAX 120 MIN .00 CFSM .41 IN 5.54 AC-FT 9240

15453500 YUKON RIVER NEAR STEVENS VILLAGE

LOCATION.--Lat 65°52'32", long 149°43'04", in SE¼SW¼ sec.7, T.12 N., R.10 W., Hydrologic Unit 19030002, on pier no. 5 of the Yukon River bridge, 730 ft (222 m) from north abutment, on TAPS haul road, 0.5 mi (0.8 km) downstream from Woodcamp Creek, 2.5 mi (4.0 km) upstream from Ray River, and 21 mi (34 km) southwest of Stevens Village.

DRAINAGE AREA.--196,300 mi^2 (508,400 km^2), approximately.

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 240.00 ft (73.152 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for period of no gage-height record, Oct. 12 to May 21, which are estimated and poor. NOAA satellite telemetry at station. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 670,000 ft^3/s (19,000 m^3/s) about June 9, 1977, gage height, 54.49 ft (16.609 m), from floodmarks; minimum daily, 18,000 ft^3/s (510 m^3/s) Apr. 1-25, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge observed downstream at Rampart (station no. 15468000), 950,000 ft^3/s (26,900 m^3/s) June 15, 16, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 502,000 ft^3/s (14,200 m^3/s) about May 11, gage height, 48.1 ft (14.66 m), from floodmarks; minimum daily, 22,000 ft^3/s (620 m^3/s) Mar. 28 to Apr. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100000	56000	34000	28000	26000	24000	22000	32000	286000	271000	288000	160000
2	100000	54000	33000	28000	26000	24000	22000	35000	288000	274000	288000	159000
3	101000	54000	33000	28000	26000	24000	22000	38000	298000	280000	278000	158000
4	101000	52000	32000	28000	26000	24000	22000	43000	308000	282000	266000	158000
5	95600	52000	32000	28000	26000	24000	22000	50000	311000	278000	261000	162000
6	93600	50000	32000	28000	26000	24000	22000	70000	309000	267000	268000	164000
7	92600	50000	32000	27000	25000	24000	22000	100000	309000	254000	277000	167000
8	92800	49000	31000	27000	25000	24000	22000	140000	312000	245000	282000	176000
9	91400	48000	31000	27000	25000	24000	22000	200000	314000	242000	282000	186000
10	89700	48000	31000	27000	25000	24000	22000	300000	312000	253000	281000	194000
11	83500	47000	31000	27000	25000	23000	22000	450000	307000	268000	282000	200000
12	82000	46000	31000	27000	25000	23000	22000	400000	304000	279000	282000	200000
13	80000	45000	30000	27000	25000	23000	22000	300000	302000	289000	278000	196000
14	78000	44000	30000	27000	25000	23000	22000	250000	302000	295000	272000	188000
15	78000	44000	30000	27000	25000	23000	22000	220000	302000	291000	267000	179000
16	76000	43000	30000	27000	25000	23000	22000	200000	300000	283000	259000	171000
17	76000	42000	30000	27000	25000	23000	22000	200000	298000	277000	249000	163000
18	74000	42000	30000	27000	25000	23000	22000	210000	292000	275000	239000	156000
19	74000	41000	30000	27000	25000	23000	22000	230000	285000	274000	228000	151000
20	72000	40000	30000	27000	25000	23000	22000	260000	278000	272000	219000	147000
21	70000	40000	29000	27000	25000	23000	22000	300000	274000	270000	211000	143000
22	70000	39000	29000	26000	25000	23000	22000	319000	265000	265000	205000	140000
23	68000	38000	29000	26000	24000	23000	22000	325000	257000	262000	203000	138000
24	66000	38000	29000	26000	24000	23000	22000	323000	250000	263000	200000	138000
25	66000	37000	29000	26000	24000	23000	22000	318000	246000	263000	195000	139000
26	64000	36000	29000	26000	24000	23000	23000	312000	246000	263000	189000	139000
27	62000	36000	29000	26000	24000	23000	24000	303000	249000	267000	183000	139000
28	60000	35000	29000	26000	24000	22000	26000	294000	252000	271000	178000	140000
29	60000	35000	28000	26000	---	22000	28000	289000	258000	271000	173000	138000
30	58000	34000	28000	26000	---	22000	30000	288000	265000	271000	167000	136000
31	56000	---	28000	26000	---	22000	---	287000	---	276000	163000	---
TOTAL	2431200	1315000	939000	833000	700000	719000	681000	7086000	8579000	8391000	7413000	4825000
MEAN	78430	43830	30290	26870	25000	23190	22700	228600	286000	270700	239100	160800
MAX	101000	56000	34000	28000	26000	24000	30000	450000	314000	295000	288000	200000
MIN	56000	34000	28000	26000	24000	22000	22000	32000	246000	242000	163000	136000
CFSM	.40	.22	.15	.14	.13	.12	.12	1.17	1.46	1.38	1.22	.82
IN.	.46	.25	.18	.16	.13	.14	.13	1.34	1.63	1.59	1.40	.91
AC-FT	4822000	2608000	1863000	1652000	1388000	1426000	1351000	14060000	17020000	16640000	14700000	9570000

CAL YR 1978 TOTAL 34966200 MEAN 95800 MAX 345000 MIN 18000 CFSM .49 IN 6.63 AC-FT 69360000
WTR YR 1979 TOTAL 43912200 MEAN 120300 MAX 450000 MIN 22000 CFSM .61 IN 8.32 AC-FT 87100000

15476000 TANANA RIVER NEAR TANACROSS

LOCATION.--Lat 63°23'18", long 143°44'47", in NE¼ sec.31, T.19 N., R.9 E., Hydrologic Unit 19030004, on right bank 0.2 mi (0.3 km) north of Cathedral Rapids, 0.3 mi (0.5 km) downstream from Cathedral Rapids Creek No. 1, 9 mi (14 km) upstream from Robertson River, and 13 mi (21 km) west of Tanacross.

DRAINAGE AREA.--8,550 mi² (22,140 km²), approximately.

PERIOD OF RECORD.--June 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,489.58 ft (454.024 m) National Geodetic Vertical Datum of 1929. Prior to June 13, 1959, on left bank at site 120 ft (37 m) upstream at same datum.

REMARKS.--Records good except those for period of no gage-height record, Oct. 13 to May 8, which are estimated and poor. Several observations of water temperature were made during the year. Satellite telemetry at station.

AVERAGE DISCHARGE.--26 years, 7,977 ft³/s (225.9 m³/s), 12.67 in/yr (322 mm/yr), 5,779,000 acre-ft/yr (7.13 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,100 ft³/s (1,110 m³/s) June 19, 1962, gage height, 11.65 ft (3.551 m); maximum gage height, 11.70 ft (3.566 m) July 22, 1975; minimum daily discharge, 1,400 ft³/s (40 m³/s) Mar. 1-31, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 36,000 ft³/s (1,020 m³/s) Aug. 4, gage height, 11.34 ft (3.456 m); minimum daily, 2,600 ft³/s (73.6 m³/s) Jan. 7 to Apr. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5780	3200	3000	2800	2600	2600	2600	12000	8020	14900	32800	19600
2	5780	3200	3000	2800	2600	2600	2600	14000	8320	13900	33300	17300
3	5730	3200	3000	2800	2600	2600	2600	15000	8620	14500	34100	15500
4	5610	3200	3000	2800	2600	2600	2600	15000	9070	14800	35000	14700
5	5440	3200	3000	2800	2600	2600	2600	14000	9370	14900	35300	15000
6	5320	3200	2800	2800	2600	2600	2600	14000	9460	16300	35000	15500
7	5200	3200	2800	2600	2600	2600	2600	13000	9460	19000	34700	15200
8	5130	3200	2800	2600	2600	2600	2600	13000	10200	20600	34600	15000
9	5110	3200	2800	2600	2600	2600	2600	12100	11100	22700	34800	14500
10	5010	3200	2800	2600	2600	2600	2600	10800	10500	23700	34600	14000
11	4960	3200	2800	2600	2600	2600	2700	9640	10900	21800	34200	13600
12	4870	3200	2800	2600	2600	2600	2700	8680	12100	21200	33100	13200
13	4700	3200	2800	2600	2600	2600	2800	7990	12600	21800	31700	12700
14	4600	3200	2800	2600	2600	2600	2800	7450	12800	27200	30600	12400
15	4500	3200	2800	2600	2600	2600	2900	7240	12300	30700	30500	12000
16	4200	3000	2800	2600	2600	2600	3000	7100	11900	29600	31200	11600
17	4000	3000	2800	2600	2600	2600	3100	6980	12200	32000	32000	11400
18	3900	3000	2800	2600	2600	2600	3300	6950	13000	32400	32300	11400
19	3800	3000	2800	2600	2600	2600	3500	6820	13100	29900	29200	11500
20	3700	3000	2800	2600	2600	2600	3600	6500	11800	27500	25200	11500
21	3600	3000	2800	2600	2600	2600	3800	6220	11600	27600	24100	11300
22	3600	3000	2800	2600	2600	2600	4000	6080	12200	28800	25000	10800
23	3500	3000	2800	2600	2600	2600	4300	5920	13000	29500	25100	10300
24	3500	3000	2800	2600	2600	2600	4700	5920	13800	29300	24500	9850
25	3500	3000	2800	2600	2600	2600	5200	6150	15000	28700	24500	9550
26	3400	3000	2800	2600	2600	2600	5800	6380	16000	29800	25900	9250
27	3400	3000	2800	2600	2600	2600	6800	6350	16900	32200	25600	9040
28	3400	3000	2800	2600	2600	2600	7800	6580	17100	34000	26000	8710
29	3400	3000	2800	2600	---	2600	8800	6980	17300	34800	23700	8600
30	3400	3000	2800	2600	---	2600	10000	7240	16700	33700	23400	8400
31	3400	---	2800	2600	---	2600	---	7840	---	32800	22000	---
TOTAL	135440	93000	87800	81800	72800	80600	117600	279910	366420	790600	924000	373400
MEAN	4369	3100	2832	2639	2600	2600	3920	9029	12210	25500	29810	12450
MAX	5780	3200	3000	2800	2600	2600	10000	15000	17300	34800	35300	19600
MIN	3400	3000	2800	2600	2600	2600	2600	5920	8020	13900	22000	8400
CFSM	.51	.36	.33	.31	.30	.30	.46	1.06	1.43	2.98	3.49	1.46
IN.	.59	.40	.38	.36	.32	.35	.51	1.22	1.59	3.44	4.02	1.62
AC-FT	268600	184500	174200	162300	144400	159900	233300	555200	726800	1568000	1833000	740600

CAL YR 1978 TOTAL 2810860 MEAN 7701 MAX 31400 MIN 2300 CFSM .90 IN 12.23 AC-FT 5575000
WTR YR 1979 TOTAL 3403370 MEAN 9324 MAX 35300 MIN 2600 CFSM 1.09 IN 14.81 AC-FT 6751000

15476300 BERRY CREEK NEAR DOT LAKE

LOCATION.--Lat 63°41'23", long 144°21'47", in NW¼ sec.13, T.22 N., R.5 E., Hydrologic Unit 19030004, on left bank 100 ft (30 m) upstream from bridge at mile 1,371.4 (2,206.6 km) on Alaska Highway, 1.9 mi (3.1 km) upstream from mouth, and 6.0 mi (9.7 km) west of Dot Lake.

DRAINAGE AREA.--65.1 mi^2 (168.6 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Annual maximum, water years 1964-71; July 1971 to current year.

REVISED RECORDS.--WSP 2136: 1964-65 (M).

GAGE.--Water-stage recorder. Altitude of gage is 1,400 ft (430 m), from topographic map. Aug. 14, 1963 to July 27, 1971, crest-stage gage at site 50 ft (15 m) downstream at same datum.

REMARKS.--Records fair except those for period of no gage-height record, Oct. 4 to June 1, which are estimated and poor.

AVERAGE DISCHARGE.--8 years, 44.6 ft^3/s (1.263 m^3/s), 9.30 in/yr (236 mm/yr), 32,310 acre-ft/yr (39.8 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,800 ft^3/s (79.3 m^3/s) July 19, 1964, gage height, 15.25 ft (4.648 m) site then in use, 15.49 ft (4.721 m) present site, from rating curve extended above 580 ft^3/s (16 m^3/s) on basis of slope-area measurement of peak flow; maximum gage height, 17.5 ft (5.33 m) in May 1976, from floodmarks, flow over ice; minimum daily discharge, 0.6 ft^3/s (0.02 m^3/s) Jan. 21 to Mar. 15, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 430 ft^3/s (12.2 m^3/s) Aug. 2, gage height, 11.86 ft (3.615 m); minimum daily, 6 ft^3/s (0.17 m^3/s) Feb. 8 to Mar. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	10	9.0	8.0	7.0	6.0	11	110	72	72	235	53
2	31	10	9.0	8.0	7.0	6.0	11	150	77	70	274	58
3	30	10	9.0	8.0	7.0	6.0	11	200	76	65	185	72
4	29	10	9.0	8.0	7.0	6.0	11	170	67	58	138	70
5	28	10	9.0	8.0	7.0	6.0	11	130	57	60	118	68
6	27	10	9.0	8.0	7.0	6.0	11	100	49	53	102	70
7	26	10	9.0	8.0	7.0	6.0	12	80	46	72	94	68
8	25	10	9.0	8.0	6.0	6.0	12	68	43	74	89	67
9	23	10	9.0	8.0	6.0	6.0	12	55	46	57	79	65
10	22	10	9.0	8.0	6.0	6.0	12	40	46	60	76	57
11	21	10	8.0	7.0	6.0	6.0	12	33	58	55	70	52
12	20	10	8.0	7.0	6.0	6.0	12	31	70	50	68	50
13	19	10	8.0	7.0	6.0	6.0	13	31	72	46	65	47
14	18	10	8.0	7.0	6.0	6.0	13	30	77	90	63	49
15	17	10	8.0	7.0	6.0	6.0	13	30	68	150	61	52
16	16	9.0	8.0	7.0	6.0	6.0	13	30	65	98	60	47
17	15	9.0	8.0	7.0	6.0	6.0	13	30	55	76	55	46
18	15	9.0	8.0	7.0	6.0	6.0	13	31	89	70	50	45
19	14	9.0	8.0	7.0	6.0	6.0	14	32	79	68	49	43
20	14	9.0	8.0	7.0	6.0	7.0	15	34	142	68	57	41
21	13	9.0	8.0	7.0	6.0	8.0	16	35	134	68	55	41
22	13	9.0	8.0	7.0	6.0	9.0	17	36	108	90	45	40
23	12	9.0	8.0	7.0	6.0	10	19	38	81	79	40	39
24	12	9.0	8.0	7.0	6.0	11	21	40	68	77	42	37
25	11	9.0	8.0	7.0	6.0	11	23	42	61	76	47	35
26	11	9.0	8.0	7.0	6.0	12	28	45	58	106	46	35
27	11	9.0	8.0	7.0	6.0	12	35	48	50	94	46	34
28	11	9.0	8.0	7.0	6.0	12	45	52	50	76	42	34
29	11	9.0	8.0	7.0	---	11	60	56	77	72	40	33
30	11	9.0	8.0	7.0	---	11	80	60	89	77	41	32
31	10	---	8.0	7.0	---	11	---	68	---	196	52	---
TOTAL	567	285.0	258.0	227.0	175.0	239.0	589	1935	2130	2423	2484	1480
MEAN	18.3	9.50	8.32	7.32	6.25	7.71	19.6	62.4	71.0	78.2	80.1	49.3
MAX	31	10	9.0	8.0	7.0	12	80	200	142	196	274	72
MIN	10	9.0	8.0	7.0	6.0	6.0	11	30	43	46	40	32
CFSM	.28	.15	.13	.11	.10	.12	.30	.96	1.09	1.20	1.23	.76
IN.	.32	.16	.15	.13	.10	.14	.34	1.11	1.22	1.38	1.42	.85
AC-FT	1120	565	512	450	347	474	1170	3840	4220	4810	4930	2940

CAL YR 1978 TOTAL 12992.0 MEAN 35.6 MAX 256 MIN 8.0 CFSM .55 IN 7.42 AC-FT 25770
WTR YR 1979 TOTAL 12792.0 MEAN 35.0 MAX 274 MIN 6.0 CFSM .54 IN 7.31 AC-FT 25370

15476300 BERRY CREEK NEAR DOT LAKE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1949, 1951-53, 1955-56, 1971-72, 1974-76, and 1979.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	BICARBONATE (M[illegible] AS HCO3)
MAY 09...	1300	55	75	7.2	3.5	35
JUN 19...	1630	76	68	6.8	10.5	42

15477500 CLEARWATER CREEK NEAR DELTA JUNCTION

LOCATION.--Lat 64°03'22", long 145°26'16", in SE¼SW¼ sec.8, T.10 S., R.12 E., Hydrologic Unit 19030004, on left bank, 0.1 mi (0.2 km) north of mile 7.7 (12.4 km) Remington Road, 0.4 mi (0.6 km) downstream from Clearwater Creek Campground, 6.0 mi (9.6 km) upstream from mouth, and 9 mi (14 km) east of Delta Junction.

DRAINAGE AREA.--360 mi² (930 km²), approximately. Drainage area contributing to ground-water base flow is probably significantly larger.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1977 to September 1979 (discontinued).

GAGE.--Nonrecording gage. Altitude of gage is 1,050 ft (320 m), from topographic map.

REMARKS.--Records fair except those for period of missing record, Oct. 23 to Apr. 27, which are estimated and poor. Precipitation events and snowmelt runoff have little if any direct effect on streamflow; the small variation in flow is almost entirely in response to seasonal fluctuations in ground-water base flow.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 830 ft³/s (23.5 m³/s) Aug. 30, 1979, gage height, 12.28 ft (3.743 m); minimum daily discharge, 650 ft³/s (18.4 m³/s) Mar. 3-21, 23-28.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge, 830 ft³/s (23.5 m³/s) Aug. 30, gage height, 12.28 ft (3.743 m); minimum daily discharge, 650 ft³/s (18.4 m³/s) Mar 3-21, 23-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	729	690	670	670	660	660	660	730	669	700	802	802
2	740	690	670	670	660	660	660	715	669	715	816	816
3	718	690	670	670	660	650	660	700	669	715	802	802
4	740	690	670	670	660	650	660	730	669	715	802	788
5	740	690	670	670	660	650	670	730	669	715	802	788
6	751	690	674	670	660	650	670	730	669	715	802	788
7	740	690	670	670	660	650	670	715	669	715	773	788
8	740	690	670	670	660	650	670	730	669	730	788	773
9	751	690	670	670	660	650	670	730	669	730	788	773
10	740	690	670	670	660	650	670	700	685	730	788	788
11	740	680	670	670	660	650	670	685	685	730	788	773
12	740	680	670	670	660	650	680	685	669	730	816	788
13	729	680	670	660	660	650	680	685	685	730	802	788
14	740	680	670	660	660	650	680	685	669	730	788	773
15	729	680	670	660	660	650	680	685	669	773	802	788
16	718	680	670	660	660	650	680	669	685	773	788	759
17	718	680	670	660	660	650	680	669	685	759	788	773
18	718	680	670	660	660	650	680	669	685	759	802	788
19	707	680	670	660	660	650	690	669	700	773	802	773
20	707	680	670	660	660	650	690	669	685	759	802	773
21	707	680	670	660	660	650	690	669	669	744	788	773
22	696	680	670	660	660	654	690	654	669	759	773	773
23	700	680	670	660	660	650	690	654	700	759	773	788
24	700	680	670	660	660	650	690	654	685	759	773	788
25	700	680	670	660	660	650	700	654	700	773	788	788
26	700	680	670	660	660	650	700	669	700	816	788	788
27	700	680	670	660	660	650	700	654	700	802	788	773
28	700	680	670	660	660	650	700	654	700	788	788	773
29	700	670	670	660	---	660	700	669	700	773	802	788
30	700	670	670	660	---	660	715	669	700	773	830	788
31	690	---	670	660	---	660	---	669	---	788	816	---
TOTAL	22328	20480	20774	20580	18480	20204	20445	21249	20446	23230	24648	23502
MEAN	720	683	670	664	660	652	682	685	682	749	795	783
MAX	751	690	674	670	660	660	715	730	700	816	830	816
MIN	690	670	670	660	660	650	660	654	669	700	773	759
AC-FT	44290	40620	41210	40820	36660	40070	40550	42150	40550	46080	48890	46620

CAL YR 1978 TOTAL 258781 MEAN 709 MAX 783 MIN 670 AC-FT 513300
WTR YR 1979 TOTAL 256366 MEAN 702 MAX 830 MIN 650 AC-FT 508500

15477500 CLEARWATER CREEK NEAR DELTA JUNCTION--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1977 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT 16...	1400	--	312	8.2	1.5	--	--	140	18	43
DEC 06...	1230	674	315	7.4	1.0	K2	K1	98	0	31
MAR 22...	1600	654	360	7.6	1.0	K0	K0	160	34	48
MAY 24...	1650	634	310	7.2	5.0	K0	K1	150	35	45
JUN 20...	1545	660	317	7.8	8.5	--	--	140	22	43
JUL 27...	1530	787	330	8.0	7.0	K3	K2	140	18	42
SEP 27...	1715	745	312	7.6	2.0	--	--	--	--	--

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT 16...	8.2	3.7	2.0	150	31	1.3	.2	14	178	179
DEC 06...	5.0	2.1	1.3	150	34	1.2	.1	5.3	182	155
MAR 22...	9.0	3.7	2.2	150	36	1.4	.2	12	191	188
MAY 24...	8.5	3.7	2.2	140	33	1.4	.2	11	189	176
JUN 20...	9.1	4.6	2.2	150	31	1.5	.2	15	170	182
JUL 27...	8.8	3.8	2.5	150	32	1.3	.2	14	186	179
SEP 27...	--	--	--	164	--	--	--	--	--	--

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
OCT 16...	.29	.00	--	--	--	--	--	--	<10	--
DEC 06...	.27	.02	--	--	--	--	--	--	100	--
MAR 22...	.26	.00	--	--	--	--	--	--	0	--
MAY 24...	.17	.01	10	2	0	2	0	0	10	2
JUN 20...	.18	.01	--	--	--	--	--	--	370	--
JUL 27...	.18	.02	--	--	--	--	--	--	10	--
SEP 27...	--	--	--	--	--	--	--	--	--	--

K NON-IDEAL COLONY COUNT

15477500 CLEARWATER CREEK NEAR DELTA JUNCTION--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, DISSOLVED (UG/L AS ZN)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT 16...	<1	--	--	--	--	--	--	--	--
DEC 06...	30	--	--	--	--	--	.10	--	--
MAR 22...	10	--	--	--	--	--	--	4	7.1
MAY 24...	0	.0	0	0	1	10	.00	2	3.4
JUN 20...	10	--	--	--	--	--	--	--	--
JUL 27...	2	--	--	--	--	--	--	2	4.2
SEP 27...	--	--	--	--	--	--	--	2	4.0

DATE	TIME	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL (UG/L)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL (UG/L)
MAY 24...	1650	.0	0	.00	.0	.0	0	.00	.0	.00	.0	.00

DATE	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL (UG/L)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN TOTAL (UG/L)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 24...	.0	.00	.0	.00	.0	.00	.00	.0	.00	.0	.00	.0

DATE	HEPTACHLOR EPOXIDE TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL (UG/L)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHYL PARATHION, TOTAL (UG/L)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOTAL (UG/L)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)
MAY 24...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.00	.00

DATE	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOTAL TRITHION (UG/L)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4-D, TOTAL (UG/L)	2,4-D, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4,5-T TOTAL (UG/L)	2,4,5-T TOTAL IN BOTTOM MATERIAL (UG/KG)	SILVEX, TOTAL (UG/L)
MAY 24...	.0	.00	0	0	.00	.0	.00	0	.00	0	.00

15481000 TANANA RIVER NEAR HARDING LAKE

LOCATION.--Lat 64°24'04", long 146°56'56", in NE¼ sec.16, T.6 S., R.4 E., Fairbanks North Star Borough, Hydrologic Unit 19030004, on right bank 2 mi (3 km) southwest of Harding Lake, 6 mi (10 km) upstream from Salcha River, and 38 mi (61 km) southeast of Fairbanks.

DRAINAGE AREA.--17,240 mi² (44,650 km²).

PERIOD OF RECORD.--May 1968 to current year (gage heights only).

REVISED RECORDS.--WRD Alaska 1972: 1971.

GAGE.--Water-stage recorder. Altitude of gage is 700 ft (213 m), from topographic map.

REMARKS.--Records poor. NOAA satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded gage height, 16.74 ft (5.102 m) July 15, 1971, but may have been higher during period of no gage-height record, July 16-18, 1971; minimum gage height not determined.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in August 1967 reached a gage height of 18.1 ft (5.52 m) from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 15.39 ft (4.691 m) July 26; minimum gage height not determined.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								---	10.33	12.38	15.12	12.41
2								11.26	10.58	12.33	15.09	12.05
3								11.20	10.76	12.39	15.00	11.67
4								11.73	10.89	12.65	14.66	11.41
5								12.30	10.93	13.02	14.59	11.28
6								11.45	11.12	13.37	14.53	11.15
7								11.14	11.25	13.59	14.57	10.90
8								10.90	11.46	13.66	14.72	10.83
9								10.53	11.58	13.62	14.64	10.91
10								10.07	11.82	13.52	14.41	10.74
11								9.74	12.10	13.57	14.12	10.75
12								9.45	12.06	13.82	13.94	10.68
13								9.27	12.03	13.73	14.07	10.59
14								9.10	12.02	13.69	14.00	10.56
15								8.99	11.87	13.84	13.88	10.81
16								8.92	11.65	14.43	13.99	10.99
17								8.87	11.51	14.49	13.95	10.84
18								8.86	11.42	14.43	13.79	10.61
19								8.80	11.53	14.40	13.65	10.41
20								8.74	11.80	14.41	13.71	10.40
21								8.65	12.25	14.53	13.51	10.51
22								8.57	12.58	14.54	12.97	10.50
23								8.55	12.85	14.83	12.76	10.41
24								8.60	12.86	14.74	12.89	10.31
25								8.66	12.78	14.73	13.00	10.26
26								8.78	12.90	15.17	13.18	10.14
27								9.08	12.74	14.97	13.11	9.91
28								9.50	12.40	14.92	13.19	9.80
29								9.88	12.23	14.98	13.11	9.70
30								10.13	12.43	15.00	12.91	9.72
31								10.21	---	14.96	12.60	---
MEAN	---	---	---	---	---	---	---	---	11.82	14.02	13.86	10.71
MAX	---	---	---	---	---	---	---	---	12.90	15.17	15.12	12.41
MIN	---	---	---	---	---	---	---	---	10.33	12.33	12.60	9.70

15484000 SALCHA RIVER NEAR SALCHAKET

LOCATION.--Lat 64°28'22", long 146°55'26", in NE¼ sec.22, T.5 S., R.4 E., Fairbanks North Star Borough, Hydrologic Unit 19030004, on right bank 0.2 mi (0.3 km) upstream from bridge on Richardson Highway, 0.5 mi (0.8 km) east of Sno-Shu Inn, 2 mi (3 km) upstream from mouth, and 6 mi (10 km) southeast of Salchaket.

DRAINAGE AREA.--2,170 mi² (5,620 km²), approximately.

PERIOD OF RECORD.--July 1909 to August 1910, published as "at mouth" (no winter records), October 1948 to current year.

GAGE.--Water-stage recorder. Datum of gage is 631.85 ft (192.588 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 10, 1910, nonrecording gage at site 1.5 mi (2.4 km) downstream at different datum. Oct. 1, 1948 to Apr. 24, 1953, nonrecording gage, and Apr. 25, 1953 to Oct. 16, 1967, water-stage recorder at site 800 ft (240 m) downstream at same datum.

REMARKS.--Records good except those for period of no gage-height record, Oct. 4 to Apr. 29, which are estimated and poor. NOAA satellite telemetry at station.

AVERAGE DISCHARGE.--31 years (water years 1949-79), 1,665 ft³/s (47.15 m³/s), 10.42 in/yr (265 mm/yr), 1,206,000 acre-ft/yr (1.49 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 97,000 ft³/s (2,750 m³/s) Aug. 14, 1967, gage height, 21.78 ft (6.639 m), present site, from floodmarks, from rating curve extended above 16,000 ft³/s (450 m³/s) on basis of slope-area measurement and slope-conveyance determination of peak flow; minimum not determined, monthly mean of 60 ft³/s (1.7 m³/s) published for March 1953.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,400 ft³/s (464 m³/s) May 3, gage height, 13.24 ft (4.036 m), only peak above base of 10,000 ft³/s (280 m³/s); minimum daily, 240 ft³/s (6.80 m³/s) Mar. 25 to Apr. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1730	600	500	400	350	280	240	11000	6300	4170	2870	2690
2	1600	600	500	400	350	280	240	12700	4260	3470	3370	2490
3	1480	600	500	400	350	280	240	14200	3760	2940	3740	2260
4	1400	600	500	400	350	280	240	14800	3990	2540	3300	2230
5	1300	600	500	400	350	280	240	11400	3450	2280	2910	2550
6	1300	540	500	400	350	280	260	9410	2960	2220	2660	2870
7	1200	540	500	400	350	260	260	9010	2920	2540	2590	3160
8	1100	540	500	400	350	260	260	6210	3450	2800	2450	3010
9	1100	540	500	400	300	260	260	3880	3000	2710	2290	2760
10	1000	540	500	400	300	260	260	2820	3030	2440	2160	2520
11	1000	540	500	400	300	260	260	2290	3220	2390	2020	2310
12	900	540	500	400	300	260	260	2310	5710	2230	1920	2140
13	900	540	500	400	300	260	260	2710	8010	2080	1800	2010
14	900	540	450	400	300	260	260	3110	8380	1920	1720	1900
15	800	540	450	400	300	260	280	3070	7770	1780	1650	1830
16	800	540	450	400	300	260	290	3070	5930	1780	1590	1770
17	800	540	450	400	300	260	300	3240	4630	2130	1540	1750
18	800	540	450	400	300	260	320	3110	3840	2390	1490	1730
19	800	540	450	400	280	260	350	2730	3430	2250	1450	1730
20	700	540	450	400	280	260	400	2350	3160	2310	1420	1700
21	700	540	450	400	280	260	450	2160	3200	2290	1420	1670
22	700	540	450	400	280	260	500	2070	3710	2280	1440	1660
23	700	540	450	400	280	260	550	2130	3950	2440	1410	1630
24	700	540	450	400	280	260	600	2320	3370	2290	1380	1590
25	700	540	450	400	280	240	700	2620	2940	2040	1340	1550
26	700	500	450	400	280	240	900	3180	2620	1980	1310	1520
27	600	500	450	400	280	240	1200	3310	2570	4050	1300	1500
28	600	500	450	400	280	240	2000	3300	2660	5450	1310	1460
29	600	500	450	400	---	240	5000	3140	2800	4190	1360	1410
30	600	500	450	400	---	240	8900	2710	4010	3410	1500	1380
31	600	---	450	400	---	240	---	9090	---	2980	2020	---
TOTAL	28810	16380	14600	12400	8600	8040	26280	159450	123030	82770	60730	60780
MEAN	929	543	471	400	307	259	876	5144	4101	2670	1959	2026
MAX	1730	600	500	400	350	280	8900	14800	8380	5450	3740	3160
MIN	600	500	450	400	280	240	240	2070	2570	1780	1300	1380
CFSM	.43	.25	.22	.18	.14	.12	.40	2.37	1.89	1.23	.90	.93
IN.	.49	.28	.25	.21	.15	.14	.45	2.73	2.11	1.42	1.04	1.04
AC-FT	57140	32330	28960	24600	17060	15950	52130	316300	244000	164200	120500	120600

CAL YR 1978 TOTAL 375545 MEAN 1029 MAX 4920 MIN 185 CFSM .47 IN 6.44 AC-FT 744900
WTR YR 1979 TOTAL 601790 MEAN 1649 MAX 14800 MIN 240 CFSM .76 IN 10.32 AC-FT 1194000

15484000 SALCHA RIVER NEAR SALCHAKET--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.67							---	10.06	9.08	8.39	8.29
2	7.57							12.30	9.13	8.71	8.66	8.17
3	7.48							12.70	8.87	8.43	8.83	8.03
4	---							12.86	8.99	8.20	8.62	8.01
5	---							11.92	8.70	8.04	8.41	8.21
6	---							11.28	8.44	8.00	8.27	8.39
7	---							11.15	8.42	8.20	8.23	8.55
8	---							10.02	8.70	8.35	8.15	8.46
9	---							8.92	8.46	8.30	8.05	8.33
10	---							8.35	8.48	8.14	7.96	8.19
11	---							8.05	8.58	8.11	7.87	8.06
12	---							8.06	9.77	8.01	7.80	7.95
13	---							8.30	10.78	7.91	7.72	7.86
14	---							8.52	10.92	7.80	7.66	7.79
15	---							8.50	10.69	7.71	7.60	7.74
16	---							8.50	9.91	7.71	7.54	7.70
17	---							8.59	9.31	7.94	7.49	7.68
18	---							8.52	8.91	8.11	7.44	7.67
19	---							8.31	8.69	8.02	7.40	7.67
20	---							8.09	8.55	8.06	7.37	7.64
21	---							7.96	8.57	8.05	7.37	7.62
22	---							7.90	8.84	8.04	7.39	7.61
23	---							7.94	8.96	8.14	7.36	7.58
24	---							8.07	8.66	8.05	7.32	7.54
25	---							8.25	8.43	7.88	7.28	7.50
26	---							8.56	8.25	7.84	7.25	7.47
27	---							8.63	8.22	8.96	7.23	7.45
28	---							8.62	8.27	9.70	7.24	7.41
29	---							8.54	8.35	9.09	7.30	7.36
30	---							8.30	8.99	8.68	7.45	7.32
31	---							11.13	---	8.45	7.86	---
MEAN	---	---	---	---	---	---	---	---	9.00	8.25	7.76	7.84
MAX	---	---	---	---	---	---	---	---	10.92	9.70	8.83	8.55
MIN	---	---	---	---	---	---	---	---	8.22	7.71	7.23	7.32

15485500 TANANA RIVER AT FAIRBANKS

LOCATION.--Lat 64°47'54", long 147°46'32", in SW¼ sec.28, T.1 S., R.1 W., (revised), Fairbanks North Star Borough, Hydrologic Unit 19030004, on right bank at south end of Peger Road in Fairbanks, 2.9 mi (4.7 km) southeast of Fairbanks International Airport, and 4.6 mi (7.4 km) upstream from the Chena River.

DRAINAGE AREA.--Undefined. Part of river flows through Salchaket Slough and is ungaged.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1973 to current year.

GAGE.--Water-stage recorder and non-recording gage. Datum of gage is 400.00 ft (121.920 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor except those for period of no gage-height record, Oct. 3 to May 4, which are estimated and poor.

AVERAGE DISCHARGE.--6 years, 19,060 ft^3/s (539.8 m^3/s), 13,810,000 acre-ft/yr (17.0 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 75,100 ft^3/s (2,130 m^3/s) Aug. 3, 1979, gage height, 31.84 ft (9.705 m); maximum gage height, 32.24 ft (9.827 m) July 22, 1975; minimum daily discharge, 3,100 ft^3/s (88 m^3/s) Feb. 14 to Mar. 31, 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 16, 1967 reached a stage of 34.4 ft (10.49 m), from floodmarks, discharge, about 125,000 ft^3/s (3,500 m^3/s), contained in reports of the Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 75,100 ft^3/s (2,130 m^3/s) Aug. 3, gage height, 31.84 ft (9.705 m); maximum gage height, 32.04 ft (9.766 m) about May 1, from floodmarks, backwater from ice; minimum daily discharge, 4,400 ft^3/s (125 m^3/s) Jan. 13 to Feb. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16000	6600	5000	4600	4400	4600	4600	58000	29000	38500	71200	44100
2	15900	6600	5000	4600	4400	4600	4600	52000	29000	38500	72900	42200
3	15000	6400	5000	4600	4400	4600	4600	47000	29000	39100	74200	40300
4	14500	6200	5000	4600	4400	4600	4600	51000	30200	39700	74900	38500
5	14000	6000	5000	4600	4400	4600	4600	55000	30600	42200	73800	36100
6	14000	6000	5000	4600	4400	4600	4800	50800	31600	46100	72000	34900
7	13200	6000	5000	4600	4400	4600	4800	44800	32600	47500	71000	34100
8	12500	5800	5000	4600	4400	4600	4800	40600	33600	48800	70800	33900
9	12200	5800	5000	4600	4400	4600	4800	36600	35100	49500	68700	33400
10	11800	5800	5000	4600	4400	4600	4800	32600	36600	50300	66500	32900
11	11100	5600	5000	4600	4400	4600	5000	29400	38100	50300	65000	32000
12	10500	5600	5000	4600	4400	4600	5000	27400	39100	51700	64500	31400
13	10000	5600	5000	4400	4400	4600	5200	25800	41600	52400	63700	30700
14	9800	5600	5000	4400	4400	4600	5200	24600	44800	53100	63400	30000
15	9800	5600	5000	4400	4400	4600	5400	23000	46000	53900	62700	29400
16	9400	5400	4800	4400	4400	4600	5600	20600	41600	58400	62700	28900
17	9200	5400	4800	4400	4400	4600	5600	19900	37600	62400	62400	28500
18	9000	5400	4800	4400	4400	4600	5800	19600	33100	64000	61700	28100
19	8800	5400	4800	4400	4400	4600	6200	18600	32800	62400	59400	27800
20	8800	5400	4800	4400	4400	4600	6600	18200	32800	63500	57600	27300
21	8600	5200	4800	4400	4400	4600	7000	17900	33900	63500	57800	26900
22	8400	5200	4800	4400	4400	4600	7600	17600	35000	63700	56400	26500
23	8400	5200	4800	4400	4400	4600	8400	17300	37300	65700	52700	26300
24	8200	5200	4800	4400	4400	4600	9000	17600	38500	67000	50800	25000
25	8200	5200	4800	4400	4400	4600	10000	18200	39700	67400	50500	24400
26	8000	5200	4800	4400	4400	4600	11000	18900	39700	68000	51200	22600
27	7800	5200	4800	4400	4400	4600	13000	20200	39700	70300	52000	21400
28	7400	5200	4800	4400	4400	4600	18000	21800	38500	68900	52000	20200
29	7200	5200	4800	4400	---	4600	24000	23000	38500	71200	51400	19300
30	7000	5200	4800	4400	---	4600	37000	24600	38500	71200	49500	18600
31	6800	---	4800	4400	---	4600	---	26600	---	71000	46600	---
TOTAL	321500	168200	151800	138800	123200	142600	247600	919200	1084100	1760200	1910000	895600
MEAN	10370	5607	4897	4477	4400	4600	8253	29650	36140	56780	61610	29850
MAX	16000	6600	5000	4600	4400	4600	37000	58000	46000	71200	74900	44100
MIN	6800	5200	4800	4400	4400	4600	4600	17300	29000	38500	46600	18600
AC-FT	637700	333600	301100	275300	244400	282800	491100	1823000	2150000	3491000	3788000	1776000

CAL YR 1978 TOTAL 6384800 MEAN 17490 MAX 59000 MIN 4800 AC-FT 12660000
WTR YR 1979 TOTAL 7862800 MEAN 21540 MAX 74900 MIN 4400 AC-FT 15600000

15845500 TANANA RIVER AT FAIRBANKS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM
OCT										
04...	1300	14500	.5	389	15200	--	--	--	--	--
MAY										
23...	1300	17100	--	197	9100	--	--	--	--	--
JUN										
18...	1300	35300	--	863	82300	--	14	21	28	36
JUL										
10...	1230	52700	15.0	2100	299000	--	26	37	50	63
24...	1300	69000	14.0	3180	592000	--	18	25	35	50
AUG										
01...	1300	71200	--	3090	594000	--	24	30	42	53
08...	1410	66300	15.0	2130	381000	--	21	29	39	53
29...	1200	51400	11.0	1650	229000	23	29	40	52	63
SEP										
06...	1130	32200	10.0	788	68500	12	17	24	31	39
12...	1200	31600	10.0	634	54100	9	9	14	20	27

DATE	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
OCT										
04...	--	--	--	--	19	32	89	100	--	--
MAY										
23...	--	--	--	--	--	--	--	--	--	--
JUN										
18...	48	68	97	100	--	--	--	--	--	--
JUL										
10...	74	90	100	--	--	--	--	--	--	--
24...	--	--	--	--	64	77	94	96	96	97
AUG										
01...	67	88	99	100	--	--	--	--	--	--
08...	67	88	99	100	--	--	--	--	--	--
29...	--	--	--	--	69	80	98	100	--	--
SEP										
06...	--	--	--	--	49	69	96	100	--	--
12...	--	--	--	--	43	61	95	100	--	--

15493000 CHENA RIVER NEAR TWO RIVERS

LOCATION.--Lat 64°53'55", long 146°24'42", in SW¼ sec.19, T.1 N., R.7 E., Fairbanks North Star Borough, Hydrologic Unit 19030004, on downstream side of bridge near midspan at mile 37.9 (61.0 km) on the Chena Hot Springs Highway, 20 mi (32 km) east of Two Rivers, and 39 mi (63 km) east of Fairbanks.

DRAINAGE AREA.--941 mi² (2,437 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) National Geodetic Vertical Datum of 1929 (Alaska Department of Highways TBM).

REMARKS.--Records fair, except those for Oct. 12 to Apr. 30, which are estimated and poor. NOAA satellite telemetry at station.

AVERAGE DISCHARGE.--12 years, 658 ft³/s (18.63 m³/s), 9.50 in/yr (241 mm/yr), 476,700 acre-ft/yr (588 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,800 ft³/s (476 m³/s) May 12, 1975, gage height, 21.05 ft (6.416 m); minimum daily, 20 ft³/s (0.6 m³/s) Feb. 6 to Mar. 12, 1970.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 13, 1967 reached a stage of 26.6 ft (8.1 m), from floodmarks, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,040 ft³/s (256 m³/s) May. 3, gage height, 19.56 ft (5.962 m); minimum daily discharge, 86 ft³/s (2.4 m³/s) Mar. 16 to Apr. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	677	270	200	130	110	94	86	5540	1740	1760	1290	1210
2	626	260	200	130	110	94	86	7650	1330	1510	1410	1080
3	576	250	200	130	110	94	86	7820	1400	1280	1330	990
4	551	250	200	130	110	94	86	6880	1290	1100	1200	954
5	523	240	200	130	110	94	86	5450	1090	1020	1120	972
6	515	240	200	130	110	94	86	5300	954	1220	1060	1060
7	500	240	200	130	110	94	86	4040	1030	1740	1020	1060
8	485	230	200	130	110	94	86	2350	954	1800	963	990
9	475	230	200	130	110	94	86	1520	1090	1600	918	936
10	451	230	200	130	110	94	86	1210	1200	1490	873	882
11	440	220	190	120	110	94	90	1140	1650	1440	837	828
12	420	220	190	120	110	94	90	1220	3270	1420	794	794
13	400	220	190	120	110	94	90	1340	3540	1270	770	762
14	400	220	190	120	110	94	90	1380	3180	1140	738	746
15	390	220	190	120	110	94	90	1320	2610	1070	706	730
16	380	220	180	120	100	86	90	1320	1970	1110	674	714
17	380	220	180	120	100	86	90	1240	1530	1150	658	730
18	360	220	180	120	100	86	92	1130	1310	1160	636	786
19	360	220	170	120	100	86	96	1020	1190	1330	615	802
20	340	220	170	120	100	86	98	954	1100	1240	615	802
21	340	210	170	120	100	86	100	891	1200	1120	636	802
22	330	210	160	120	100	86	110	873	1330	1160	615	802
23	320	210	160	120	100	86	110	891	1220	1220	594	786
24	310	210	150	120	100	86	120	918	1060	1110	573	746
25	310	210	150	120	100	86	140	1000	981	1020	559	722
26	300	210	150	120	100	86	190	1080	1010	1100	545	698
27	300	210	140	120	100	86	270	1100	1070	2230	538	674
28	290	210	140	120	100	86	800	1080	1100	2220	552	650
29	290	210	140	120	---	86	1500	945	1620	1690	594	629
30	280	210	140	120	---	86	3600	1780	2020	1430	738	608
31	270	---	140	120	---	86	---	2950	---	1330	1160	---
TOTAL	12589	6740	5470	3820	2950	2786	8716	73332	46039	42480	25331	24945
MEAN	406	225	176	123	105	89.9	291	2366	1535	1370	817	832
MAX	677	270	200	130	110	94	3600	7820	3540	2230	1410	1210
MIN	270	210	140	120	100	86	86	873	954	1020	538	608
CFSM	.43	.24	.19	.13	.11	.10	.31	2.51	1.63	1.46	.87	.88
IN.	.50	.27	.22	.15	.12	.11	.34	2.90	1.82	1.68	1.00	.99
AC-FT	24970	13370	10850	7580	5850	5530	17290	145500	91320	84260	50240	49480

CAL YR 1978 TOTAL 137071 MEAN 376 MAX 1700 MIN 55 CFSM .40 IN 5.42 AC-FT 271900
WTR YR 1979 TOTAL 255198 MEAN 699 MAX 7820 MIN 86 CFSM .74 IN 10.09 AC-FT 506200

15493000 CHENA RIVER NEAR TWO RIVERS--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.62						---	18.02	15.58	15.60	15.19	15.12
2	14.54						---	19.10	15.23	15.39	15.30	14.99
3	14.45						---	19.17	15.29	15.18	15.23	14.90
4	14.40						---	18.74	15.19	15.01	15.11	14.86
5	14.35						---	17.97	15.00	14.93	15.03	14.88
6	14.33						---	17.89	14.86	15.13	14.97	14.97
7	14.30						---	17.19	14.94	15.58	14.93	14.97
8	14.27						---	16.06	14.86	15.63	14.87	14.90
9	14.25						---	15.40	15.00	15.47	14.82	14.84
10	14.20						---	15.12	15.11	15.37	14.77	14.78
11	14.18						---	15.05	15.51	15.33	14.73	14.72
12	14.18						---	15.13	16.72	15.31	14.68	14.68
13	14.18						---	15.24	16.89	15.17	14.65	14.64
14	14.18						---	15.27	16.66	15.05	14.61	14.62
15	14.17						---	15.22	16.25	14.98	14.57	14.60
16	14.16						---	15.22	15.77	15.02	14.53	14.58
17	14.16						---	15.15	15.41	15.06	14.51	14.60
18	14.10						---	15.04	15.21	15.07	14.48	14.67
19	14.07						---	14.93	15.10	15.23	14.45	14.69
20	14.05						---	14.86	15.01	15.15	14.45	14.69
21	---						---	14.79	15.11	15.03	14.48	14.69
22	---						---	14.77	15.23	15.07	14.45	14.69
23	---						---	14.79	15.13	15.13	14.42	14.67
24	---						---	14.82	14.97	15.02	14.39	14.62
25	---						---	14.91	14.89	14.93	14.37	14.59
26	---						---	14.99	14.92	15.01	14.35	14.56
27	---						---	15.01	14.98	15.97	14.34	14.53
28	---						---	14.99	15.01	15.96	14.36	14.50
29	---						---	14.85	15.48	15.54	14.42	14.47
30	---						17.39	15.62	15.81	15.32	14.61	14.44
31	---						---	16.49	---	15.23	15.07	---
MEAN	---						---	15.86	15.37	15.25	14.68	14.72
MAX	---						---	19.17	16.89	15.97	15.30	15.12
MIN	---						---	14.77	14.86	14.93	14.34	14.44

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968, 1971, 1972, 1975, and 1979.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	BICAR-BONATE (MG/L AS HCO3)
APR						
27...	1300	265	170	7.1	.5	68
30...	1430	3520	100	6.6	.5	30

15493500 CHENA RIVER NEAR NORTH POLE

LOCATION.--Lat 64°47'47", long 147°11'56", in SW¼ sec.29, T.1 S., R.3 E., Fairbanks North Star Borough, Hydrologic Unit 19030004, on left bank 5.5 mi (8.8 km) northeast of North Pole, 6 mi (10 km) upstream from Potlatch Creek, 11 mi (18 km) downstream from Mullen Slough, and 15.7 mi (25.3 km) east of Fairbanks.

DRAINAGE AREA.--1,430 mi^2 (3,704 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 478.08 ft (145.719 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.-Records estimated and poor for period of no gage-height record prior to May 3 and fair thereafter.

AVERAGE DISCHARGE.--7 years, 748 ft^3/s (21.18 m^3/s), 7.10 in/yr (180 mm), 541,900 acre-ft/yr (668 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,300 ft^3/s (348 m^3/s) May 14, 1975, gage height, 14.18 ft (4.322 m); minimum daily, 50 ft^3/s (1.4 m^3/s) Mar. 1-20, 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Aug. 13, 1967 was the largest flood since 1905.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,530 ft^3/s (270 m^3/s) May 4, gage height, 12.64 ft (3.853 m); minimum daily, 120 ft^3/s (3.4 m^3/s) Mar. 11 to Apr. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	900	260	220	170	150	130	120	6400	2440	2100	1870	1450
2	860	260	220	170	150	130	120	8000	1930	1960	1800	1480
3	800	260	220	170	150	130	120	9000	1680	1790	1870	1360
4	740	250	210	170	140	130	120	9360	1670	1580	1770	1250
5	680	250	210	170	140	130	120	7980	1540	1420	1650	1200
6	640	250	210	170	140	130	120	6370	1370	1380	1540	1200
7	600	240	210	170	140	130	120	5780	1200	1650	1450	1220
8	560	240	210	170	140	130	120	4210	1220	2130	1400	1220
9	520	240	200	170	140	130	120	2890	1150	2220	1310	1160
10	500	240	200	170	140	130	120	2200	1260	2040	1240	1100
11	480	230	200	160	140	120	130	1820	1380	1920	1170	1030
12	450	230	200	160	130	120	130	1680	2130	1870	1110	1010
13	430	230	200	160	130	120	130	1660	3640	1850	1070	978
14	420	230	200	160	130	120	130	1700	3930	1700	1060	954
15	400	230	200	160	130	120	140	1660	3780	1540	1030	930
16	380	230	190	160	130	120	140	1590	3130	1440	990	906
17	370	230	190	160	130	120	150	1540	2460	1420	948	900
18	360	230	190	160	130	120	150	1450	2070	1430	924	906
19	350	230	190	160	130	120	160	1340	1820	1480	906	936
20	340	230	190	160	130	120	170	1250	1640	1530	888	948
21	330	230	190	160	130	120	180	1200	1540	1500	876	954
22	320	230	190	160	130	120	200	1120	1670	1450	876	954
23	310	230	180	160	130	120	220	1100	1720	1580	870	954
24	300	230	180	160	130	120	260	1090	1570	1700	846	942
25	300	230	180	160	130	120	300	1090	1420	1570	816	924
26	290	220	180	150	130	120	450	1150	1320	1450	798	900
27	290	220	180	150	130	120	700	1220	1300	1850	786	882
28	280	220	180	150	130	120	1300	1230	1330	3050	780	864
29	280	220	180	150	---	120	2500	1220	1380	2650	780	846
30	280	220	180	150	---	120	4800	1120	1960	2230	816	828
31	270	---	180	150	---	120	---	2540	---	1990	1010	---
TOTAL	14030	7040	6060	5000	3780	3820	13540	91960	56650	55470	35250	31186
MEAN	453	235	195	161	135	123	451	2966	1888	1789	1137	1040
MAX	900	260	220	170	150	130	4800	9360	3930	3050	1870	1480
MIN	270	220	180	150	130	120	120	1090	1150	1380	780	828
CFSM	.32	.16	.14	.11	.09	.09	.32	2.07	1.32	1.25	.80	.73
IN.	.36	.18	.16	.13	.10	.10	.35	2.39	1.47	1.44	.92	.81
AC-FT	27830	13960	12020	9920	7500	7580	26860	182400	112400	110000	69920	61860

CAL YR 1978 TOTAL 182721 MEAN 501 MAX 1670 MIN 80 CFSM .35 IN 4.75 AC-FT 362400
WTR YR 1979 TOTAL 323786 MEAN 887 MAX 9360 MIN 120 CFSM .62 IN 8.42 AC-FT 642200

15493500 CHENA RIVER NEAR NORTH POLE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: May 1972 to current year.

INSTRUMENTATION.--Temperature recorder since May 5, 1972.

REMARKS.--No temperature record Oct. 13 to Apr. 30 as gage was shut down for winter.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURES: Maximum, 16.0°C July 7, 1972, July 11, 12, 1975; minimum, 0.0°C most days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 13.5°C July 19, 20; minimum, 0.0°C most days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

OCTOBER

DAY	MAX	MIN	DAY	MAX	MIN	DAY	MAX	MIN	DAY	MAX	MIN
1	4.5	3.0	4	1.0	.5	7	.5	.5	10	1.0	1.0
2	3.0	2.0	5	.5	.5	8	1.0	.5	11	1.0	.5
3	2.0	1.0	6	.5	.5	9	1.0	1.0	12	.5	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			2.0	2.0	10.0	8.5	12.0	11.0	12.0	11.5	9.5	8.5
2			2.0	2.0	10.0	10.0	12.0	11.5	11.5	11.5	8.5	7.5
3			2.5	2.0	10.5	9.5	12.5	11.5	11.5	11.5	7.5	7.5
4			2.5	2.5	10.5	9.5	12.5	12.5	11.5	11.0	7.5	7.0
5			3.5	2.5	10.5	10.0	12.5	11.5	11.5	11.5	7.0	7.0
6			4.0	3.5	11.0	10.0	11.5	10.5	11.5	11.0	7.5	7.0
7			4.0	4.0	11.0	11.0	10.5	10.0	11.0	11.0	8.0	7.5
8			4.0	3.0	11.0	10.5	10.0	9.0	11.0	11.0	8.0	7.5
9			4.0	3.5	11.5	10.5	10.5	9.0	11.5	11.0	8.5	8.0
10			5.0	4.0	11.5	11.5	11.0	10.0	11.5	11.5	8.5	8.0
11			6.0	5.0	11.5	10.0	11.5	11.0	11.5	11.5	8.0	8.0
12			6.5	6.0	10.0	8.0	12.0	11.0	12.5	11.5	8.0	7.5
13			6.5	6.0	8.0	7.5	12.0	11.5	12.5	12.0	8.0	7.0
14			7.0	6.5	8.0	7.5	13.0	12.0	12.5	11.0	7.0	6.5
15			7.0	7.0	8.5	7.5	13.0	12.5	11.5	11.0	6.5	6.0
16			7.5	7.0	9.5	8.5	12.5	11.5	12.0	11.5	6.5	6.5
17			7.5	7.0	9.5	9.0	13.0	11.5	12.0	11.5	6.5	5.5
18			7.5	7.0	10.5	9.0	13.0	12.5	11.5	11.0	5.5	5.0
19			7.5	7.0	10.5	10.5	13.5	12.5	11.5	11.0	5.0	5.0
20			8.5	7.0	10.5	10.5	13.5	13.0	11.0	10.5	5.0	5.0
21			8.0	7.5	11.0	10.5	13.0	13.0	10.5	9.5	5.5	4.5
22			8.5	7.5	12.0	11.0	13.0	12.5	11.0	10.0	5.5	5.5
23			9.0	8.0	12.0	11.0	12.5	11.5	11.0	10.5	5.5	5.5
24			9.0	9.0	11.5	11.0	12.5	12.0	11.5	10.5	5.5	5.5
25			9.0	9.0	11.5	10.5	13.0	12.5	11.5	11.0	5.5	4.5
26			10.0	8.5	10.5	10.0	13.0	11.5	11.0	10.5	4.5	4.5
27			10.0	9.5	11.0	10.0	11.5	10.5	10.5	10.5	4.5	4.0
28			10.0	9.5	11.0	10.5	11.0	10.5	10.5	10.0	4.0	4.0
29			10.0	9.5	10.5	10.0	11.5	10.5	10.0	9.0	4.0	4.0
30			9.5	9.5	11.5	10.5	12.0	11.5	9.0	8.5	4.0	3.5
31			9.5	9.0	---	---	12.0	11.5	9.5	8.5	---	---
MONTH			10.0	2.0	12.0	7.5	13.5	9.0	12.5	8.5	9.5	3.5
YEAR	13.5	.0										

15511000 LITTLE CHENA RIVER NEAR FAIRBANKS

LOCATION.--Lat 64°53'10", long 147°14'50", in SW¼NE¼ sec.25, T.1 N., R.2 E., Fairbanks North Star Borough, Hydrologic Unit 19030004, on downstream side of left bridge abutment at mile 11.9 (19.1 km) on Chena Hot Springs Highway, and 14 mi (23 km) northeast of Fairbanks.

DRAINAGE AREA.--372 mi^2 (963 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 490 ft (150 m), from topographic map.

REMARKS.--Records fair except those for period of no gage-height record, Oct. 3 to Apr. 30, which are estimated and poor. NOAA satellite telemetry at station.

AVERAGE DISCHARGE.--13 years, 210 ft^3/s (5.947 m^3/s), 7.67 in/yr (195 mm/yr), 152,100 acre-ft/yr (188 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,000 ft^3/s (481 m^3/s) Aug. 13, 1967, gage height, 31.95 ft (9.738 m), from rating curve extended above 3,000 ft^3/s (85 m^3/s) on basis of contracted-opening determination of peak flow; no flow Mar. 11 to Apr. 15, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,320 ft^3/s (65.7 m^3/s) May 2, gage height, 24.14 ft (7.358 m); minimum daily discharge, 21 ft^3/s (0.59 m^3/s) Mar. 13 to Apr. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	205	69	75	56	44	23	21	2190	350	396	448	327
2	180	68	75	56	43	23	21	2270	300	370	436	297
3	170	68	75	55	43	23	21	2110	250	375	431	274
4	160	69	75	55	42	23	21	1610	280	335	396	257
5	150	69	75	55	41	23	21	1210	255	314	375	244
6	150	69	75	54	40	22	21	1040	225	424	366	236
7	140	70	75	54	38	22	21	858	287	856	354	226
8	140	70	75	53	37	22	21	614	326	813	338	220
9	130	70	75	53	36	22	21	465	262	723	326	208
10	130	71	75	52	35	22	21	394	228	630	310	190
11	120	71	75	52	34	22	21	354	250	545	294	182
12	120	72	74	52	33	22	22	324	504	488	284	180
13	110	72	74	52	32	21	23	308	645	439	274	176
14	110	73	73	51	31	21	24	300	577	406	265	172
15	110	73	72	51	30	21	27	292	517	383	257	172
16	100	73	71	51	29	21	30	282	429	386	247	168
17	100	73	70	50	28	21	33	262	356	380	238	176
18	98	73	69	50	28	21	36	238	364	364	231	182
19	96	73	67	49	27	21	40	220	346	343	226	180
20	94	74	66	49	27	21	44	212	305	324	216	184
21	90	74	65	49	26	21	48	208	306	310	223	184
22	88	74	64	48	26	21	56	194	345	329	216	192
23	84	74	63	48	25	21	66	186	308	473	196	184
24	82	74	62	48	25	21	80	180	282	410	186	176
25	80	74	61	47	24	21	100	180	265	358	178	170
26	78	74	60	47	24	21	140	214	263	356	172	168
27	74	74	60	46	23	21	250	230	278	522	170	162
28	72	74	59	46	23	21	480	214	260	540	178	160
29	70	74	58	45	---	21	850	192	353	456	204	156
30	70	74	57	45	---	21	1600	212	461	401	246	150
31	69	---	57	44	---	21	---	432	---	415	332	---
TOTAL	3470	2160	2127	1563	894	668	4180	17995	10177	13864	8613	5953
MEAN	112	72.0	68.6	50.4	31.9	21.5	139	580	339	447	278	198
MAX	205	74	75	56	44	23	1600	2270	645	856	448	327
MIN	69	68	57	44	23	21	21	180	225	310	170	150
CFSM	.30	.19	.18	.14	.09	.06	.37	1.56	.91	1.20	.75	.53
IN.	.35	.22	.21	.16	.09	.07	.42	1.80	1.02	1.39	.86	.60
AC-FT	6880	4280	4220	3100	1770	1320	8290	35690	20190	27500	17080	11810

CAL YR 1978 TOTAL 43005 MEAN 118 MAX 556 MIN 17 CFSM .32 IN 4.30 AC-FT 85300
WTR YR 1979 TOTAL 71664 MEAN 196 MAX 2270 MIN 21 CFSM .53 IN 7.17 AC-FT 142100

15511000 LITTLE CHENA RIVER NEAR FAIRBANKS--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.74							23.50	---	12.90	13.21	12.51
2	11.60							23.90	---	12.74	13.14	12.35
3	---							23.07	---	12.77	13.10	12.24
4	---							20.44	---	12.55	12.90	12.15
5	---							17.99	12.14	12.44	12.77	12.07
6	---							16.89	11.98	13.07	12.71	12.04
7	---							15.65	12.30	15.64	12.65	11.99
8	---							14.18	12.50	15.36	12.57	11.96
9	---							13.31	12.17	14.83	12.50	11.91
10	---							12.89	12.00	14.28	12.42	11.83
11	---							12.65	12.11	13.78	12.34	11.80
12	---							12.49	13.53	13.44	12.29	11.79
13	---							12.41	14.37	13.16	12.24	11.77
14	---							12.37	13.97	12.95	12.19	11.76
15	---							12.33	13.62	12.82	12.15	11.76
16	---							12.28	13.10	12.84	12.10	11.74
17	---							12.17	12.66	12.80	12.05	11.77
18	---							12.05	12.70	12.69	12.01	11.80
19	---							11.96	12.61	12.59	11.99	11.79
20	---							11.92	12.39	12.49	11.94	11.81
21	---							11.91	12.40	12.42	11.97	11.81
22	---							11.84	12.60	12.54	11.94	11.84
23	---							11.82	12.41	13.36	11.86	11.81
24	---							11.79	12.28	12.98	11.82	11.77
25	---							11.79	12.19	12.67	11.78	11.75
26	---							11.94	12.18	12.66	11.76	11.74
27	---							12.01	12.25	13.66	11.75	11.72
28	---							11.93	12.16	13.74	11.78	11.71
29	---							11.84	12.64	13.25	11.89	11.69
30	---							11.93	13.29	12.93	12.09	11.67
31	---							13.12	---	13.92	12.53	---
MEAN	---							14.08	---	13.21	12.27	11.88
MAX	---							23.90	---	15.64	13.21	12.51
MIN	---							11.79	---	12.42	11.75	11.67

15511000 LITTLE CHENA RIVER NEAR FAIRBANKS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967-68, 1971 to current year.
PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: May 1972 to current year.
INSTRUMENTATION.--Water temperature recorder since May 9, 1972.
REMARKS.--No temperature record Nov. 1 to Apr. 30, as gage was shut down for winter. The river is ice covered from October to May.
EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 16.0°C, June 30, 1973; minimum, 0.0°C, most days during winter period.
EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 11.0°C July 4-5; minimum, 0.0°C, most days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	BICAR-BONATE (MG/L AS HCO3)
APR						
27...	1530	254	100	6.8	.5	37
30...	1700	1620	45	6.0	.5	12
MAY						
01...	1000	2270	50	6.3	.5	13

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

OCTOBER

DAY	MAX	MIN	DAY	MAX	MIN	DAY	MAX	MIN	DAY	MAX	MIN
1	2.5	1.0	9	1.5	1.0	17	.0	.0	25	.0	.0
2	1.0	.5	10	1.5	.5	18	.0	.0	26	.0	.0
3	.5	.0	11	.5	.0	19	.0	.0	27	.0	.0
4	.0	.0	12	.5	.0	20	.0	.0	28	.0	.0
5	.0	.0	13	.0	.0	21	.0	.0	29	.0	.0
6	.0	.0	14	.0	.0	22	.0	.0	30	.0	.0
7	.0	.0	15	.0	.0	23	.0	.0	31	.0	.0
8	1.0	.0	16	.0	.0	24	.0	.0			
									MONTH	2.5	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			.5	.5	8.5	7.0	10.0	9.0	10.0	9.0	7.5	7.0
2			1.0	.5	9.5	8.5	10.0	9.0	10.0	9.5	7.0	6.5
3			2.0	1.0	9.5	8.5	10.5	9.5	10.0	9.0	6.5	6.0
4			2.0	1.0	9.0	8.0	11.0	10.5	9.5	9.5	6.0	6.0
5			2.0	1.5	9.5	8.5	11.0	10.0	10.0	9.5	6.0	5.5
6			2.5	2.0	9.5	8.0	10.0	8.5	10.0	10.0	6.0	5.5
7			2.5	2.0	9.5	8.5	8.5	7.0	10.0	9.0	6.0	6.0
8			2.0	1.5	9.0	7.5	7.0	6.5	9.0	9.0	6.0	6.0
9			2.5	2.0	10.0	8.0	7.5	6.5	9.5	9.0	6.0	5.5
10			3.5	2.5	10.0	9.5	8.5	7.5	10.0	9.0	6.0	6.0
11			4.5	3.5	9.5	8.5	8.5	8.0	10.0	9.5	6.0	5.5
12			4.5	4.0	8.5	7.0	9.0	8.0	10.5	10.0	6.0	5.0
13			4.5	4.0	7.0	6.0	9.5	9.0	10.5	10.0	6.0	5.5
14			5.0	4.0	6.5	6.0	10.0	9.0	10.5	9.5	5.5	5.0
15			5.5	5.0	7.5	6.5	10.0	9.5	9.5	9.0	5.0	5.0
16			5.5	4.5	8.0	7.5	9.5	9.0	10.5	9.5	5.5	5.0
17			6.0	5.0	8.5	8.0	10.5	9.5	10.0	9.5	5.5	4.5
18			6.0	5.5	9.0	7.5	10.5	10.0	10.0	9.0	4.5	3.0
19			6.0	5.5	9.0	8.5	10.0	9.0	10.0	9.0	3.0	3.0
20			6.5	5.5	8.5	8.0	10.5	9.5	9.5	9.0	3.5	3.0
21			7.0	6.0	9.5	8.5	10.5	10.0	9.0	8.5	4.5	4.0
22			7.0	6.0	9.5	9.0	10.5	10.0	9.0	9.0	4.5	4.5
23			7.5	6.0	9.5	9.0	10.0	9.0	9.0	9.0	4.5	4.5
24			8.0	7.5	10.0	9.0	10.5	9.5	9.5	9.0	4.5	4.5
25			8.0	7.5	10.0	9.5	10.5	10.5	9.5	9.0	4.5	3.5
26			8.0	6.5	9.5	8.5	10.5	9.0	---	---	3.5	3.0
27			8.5	7.5	9.5	8.5	9.0	8.5	---	---	3.0	2.5
28			8.5	7.5	9.5	9.0	8.5	8.0	---	---	2.5	2.5
29			8.5	7.5	9.0	8.0	9.0	8.5	8.0	8.0	2.5	2.0
30			8.5	7.5	9.0	8.5	9.5	9.0	8.0	7.5	2.0	2.0
31			8.5	7.0	---	---	10.0	9.5	7.5	7.5	---	---
MONTH			8.5	.5	10.0	6.0	11.0	6.5	10.5	7.5	7.5	2.0
YEAR	11.0	.0										

15514000 CHENA RIVER AT FAIRBANKS

LOCATION.--Lat 64°50'45", long 147°42'04", in NW¼ sec.11, T.1 S., R.1 W., Fairbanks North Star Borough, Hydrologic Unit 19030004, on right bank 800 ft (240 m) upstream from Wendell Street bridge and 100 ft (30 m) downstream from Steese Highway bridge in Fairbanks, 0.3 mi (0.5 km) upstream from Noyes Slough, 11 mi (18 km) upstream from mouth, and 11 mi (18 km) downstream from Chena Slough.

DRAINAGE AREA.--1,980 mi² (5,130 km²), approximately.

PERIOD OF RECORD.--July 1947 to September 1948 (no winter records), October 1948 to current year.

GAGE.--Water-stage recorder and nonrecording gage used as supplementary gage below stage of 1.30 ft (0.396 m). Datum of gage is 422.92 ft (128.906 m) National Geodetic Vertical Datum of 1929. See WSP 1936 and 2136 for history of changes prior to Apr. 27, 1968.

REMARKS.--Records good except those for Oct. 5 to May 3, which are estimated and poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--31 years (water years 1949-79), 1,418 ft³/s (40.16 m³/s), 9.73 in/yr (247 mm/yr), 1,027,000 acre-ft/yr (1.27 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 74,400 ft³/s (2,110 m³/s) Aug. 15, 1967, gage height, 18.82 ft (5.736 m), site then in use; minimum not determined, monthly means of 120 ft³/s (3.4 m³/s) published for February 1953 and March 1958.

EXTREMES OUTSIDE PERIOD OF RECORD.--Outstanding floods in early May 1905 and 1911 reached stages of about 17 ft (5.2 m) and 16 ft (4.9 m) respectively, present site and datum, probably some backwater from ice, from profile of floodmarks in a report by Corps of Engineers. Flood of late August 1930 reached a stage of 16.8 ft (5.12 m), present site and datum, from information in above report. Flood of May 11-14, 1937 reached a stage of 15.7 ft (4.79 m) present datum, from floodmarks at Cushman Street bridge, 16.5 ft (5.03 m), present site and datum, from above report, backwater from ice. Prior to construction of a dike in 1941, it was possible for floodwaters from the Tanana River in Piledriver Slough to be diverted to the Chena River through Chena Slough.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,500 ft³/s (297 m³/s) May 4, gage height, 9.50 ft (2.896 m); only peak above base of 6,000 ft³/s (170 m³/s); minimum daily discharge, 190 ft³/s (5.4 m³/s) Mar. 14 to Apr. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1310	460	380	320	270	200	190	8000	2960	2430	2530	1740
2	1280	460	380	320	270	200	190	9000	2500	2440	2430	1970
3	1200	460	380	320	260	200	190	10000	2140	2330	2420	1970
4	1100	460	380	320	260	200	190	10500	2050	2170	2430	1910
5	1000	440	380	310	250	200	190	9870	2000	2010	2300	1820
6	960	440	380	310	250	200	190	8080	1850	1910	2190	1800
7	900	440	360	310	240	200	200	7040	1700	2090	2100	1790
8	860	440	360	310	240	200	200	5790	1700	2700	2030	1770
9	820	420	360	310	240	200	200	4080	1680	2880	1940	1720
10	780	420	360	300	230	200	200	3150	1640	2830	1860	1680
11	740	420	360	300	230	200	200	2800	1780	2640	1810	1640
12	700	420	360	300	230	200	200	2500	2000	2510	1750	1590
13	680	420	360	300	230	200	200	2300	3500	2430	1700	1530
14	660	420	360	300	220	190	210	2400	4290	2330	1640	1460
15	640	420	360	300	220	190	210	2300	4360	2160	1600	1420
16	620	400	340	290	220	190	220	2140	3860	2080	1550	1420
17	600	400	340	290	220	190	220	2100	3200	2010	1520	1420
18	580	400	340	290	220	190	240	2000	2720	2010	1470	1390
19	560	400	340	290	210	190	260	1900	2430	1990	1440	1390
20	560	400	340	290	210	190	280	1800	2230	2010	1410	1390
21	540	400	340	290	210	190	300	1700	2080	2000	1380	1380
22	540	400	340	290	210	190	320	1620	2030	1950	1370	1370
23	520	400	340	290	210	190	340	1560	2120	2010	1360	1370
24	520	400	340	290	210	190	380	1540	2090	2210	1340	1340
25	500	400	340	290	210	190	440	1520	1980	2190	1320	1300
26	500	400	330	280	210	190	500	1540	1850	2090	1320	1280
27	500	400	330	280	210	190	700	1600	1780	2100	1290	1270
28	480	400	330	280	210	190	1000	1630	1760	3030	1250	1240
29	480	400	330	280	---	190	4000	1620	1760	3410	1240	1180
30	480	380	330	280	---	190	6000	1560	2010	2990	1260	1160
31	480	---	320	270	---	190	---	1960	---	2660	1370	---
TOTAL	22070	12520	10890	9200	6400	6020	18160	115600	70050	72600	52620	45710
MEAN	712	417	351	297	229	194	605	3729	2335	2342	1697	1524
MAX	1310	460	380	320	270	200	6000	10500	4360	3410	2530	1970
MIN	480	380	320	270	210	190	190	1520	1640	1910	1240	1160
CFSM	.36	.21	.18	.15	.12	.10	.31	1.88	1.18	1.18	.86	.77
IN.	.41	.24	.20	.17	.12	.11	.34	2.17	1.32	1.36	.99	.86
AC-FT	43780	24830	21600	18250	12690	11940	36020	229300	138900	144000	104400	90670

CAL YR 1978 TOTAL 269989 MEAN 740 MAX 2720 MIN 200 CFSM .37 IN 5.07 AC-FT 535500
WTR YR 1979 TOTAL 441840 MEAN 1211 MAX 10500 MIN 190 CFSM .61 IN 8.30 AC-FT 876400

15514000 CHENA RIVER AT FAIRBANKS--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.61							---	3.46	2.92	3.02	2.14
2	1.58							---	3.00	2.93	2.92	2.41
3	1.47							---	2.60	2.81	2.90	2.41
4	1.35							9.48	2.50	2.63	2.92	2.34
5	---							9.02	2.45	2.45	2.77	2.24
6	---							7.74	2.28	2.35	2.65	2.21
7	---							7.00	2.19	2.53	2.56	2.20
8	---							5.96	2.19	3.19	2.48	2.19
9	---							4.50	2.08	3.38	2.38	2.12
10	---							3.65	2.03	3.33	2.29	2.07
11	---							---	2.20	3.14	2.23	2.02
12	---							---	2.45	3.00	2.15	1.95
13	---							---	3.97	2.92	2.09	1.88
14	---							---	4.69	2.81	2.02	1.79
15	---							---	4.75	2.62	1.97	1.75
16	---							2.60	4.31	2.53	1.91	1.76
17	---							---	3.69	2.46	1.87	1.74
18	---							---	3.21	2.45	1.81	1.71
19	---							---	2.92	2.43	1.77	1.71
20	---							---	2.70	2.46	1.73	1.71
21	---							2.10	2.53	2.46	1.69	1.70
22	---							2.00	2.48	2.39	1.68	1.68
23	---							1.93	2.58	2.45	1.67	1.68
24	---							1.90	2.54	2.68	1.64	1.65
25	---							1.87	2.42	2.65	1.62	1.60
26	---							1.90	2.27	2.54	1.62	1.57
27	---							1.98	2.19	2.54	1.58	1.56
28	---							2.01	2.16	3.53	1.54	1.52
29	---							2.00	2.17	3.80	1.52	1.45
30	---							1.93	2.45	3.48	1.55	1.42
31	---							2.40	---	3.16	1.68	---
MEAN	---							---	2.78	2.81	2.07	1.87
MAX	---							---	4.75	3.80	3.02	2.41
MIN	---							---	2.03	2.35	1.52	1.42

15515500 TANANA RIVER AT NENANA
(National stream-quality accounting network station)

LOCATION.--Lat 64°33'55", long 149°05'30", in SE¼ sec.14, T.4 S., R.8 W., Hydrologic Unit 19030004, on left bank on east end of Alaska Railroad dock in Nenana and 0.3 mi (0.5 km) upstream from Nenana River.

DRAINAGE AREA.--25,600 mi² (66,300 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1962 to current year.

REVISED RECORDS.--WSP 2136: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 338.50 ft (103.175 m) National Geodetic Vertical Datum of 1929. Prior to Mar. 10, 1965, on right bank 280 ft (85 m) downstream from railroad bridge 0.5 mi (0.8 km) upstream at present datum. Mar. 10, 1965 to Mar. 23, 1968, nonrecording gage on railroad bridge 0.5 mi (0.8 km) upstream at present datum.

REMARKS.--Records fair except those for period of no gage-height record, Oct. 12 to May 1, which are estimated and poor. NOAA Satellite telemetry at station.

AVERAGE DISCHARGE.--17 years, 23,560 ft³/s (667.2 m³/s), 12.50 in/yr (318 mm/yr), 17,070,000 acre-ft/yr (21.0 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 186,000 ft³/s (5,270 m³/s) Aug. 18, 1967, gage height, 18.90 ft (5.761 m), site then in use; minimum daily, 4,000 ft³/s (110 m³/s) Mar. 6-20, 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 1948 reached a stage of 15.9 ft (4.85 m), discharge, about 135,000 ft³/s (3,820 m³/s), contained in reports of Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 79,900 ft³/s (2,260 m³/s) Aug. 4, gage height, 10.54 ft (3.213 m); minimum daily, 7,000 ft³/s (198 m³/s) Jan. 12 to Apr. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17700	9200	8400	7300	7000	7000	7000	38000	34200	47900	76600	49100
2	17000	9200	8400	7300	7000	7000	7000	52500	34800	48400	78200	47200
3	17400	9200	8400	7300	7000	7000	7000	66600	34400	47500	78600	44800
4	16400	9200	8400	7300	7000	7000	7000	64400	34400	47100	79200	41900
5	16200	9200	8400	7300	7000	7000	7000	62800	35100	49300	78400	39400
6	16000	9200	8000	7300	7000	7000	7000	62200	36000	53800	76700	37900
7	15200	8800	8000	7300	7000	7000	7000	58900	36600	58400	75300	37300
8	14500	8800	8000	7300	7000	7000	7000	54500	37300	59900	75200	36700
9	14200	8800	8000	7300	7000	7000	7000	49800	37900	59500	74600	36300
10	13800	8800	8000	7300	7000	7000	7000	45300	38500	58100	72700	35500
11	13100	8800	8000	7300	7000	7000	7000	42200	40500	56700	70900	34600
12	12000	8800	8000	7000	7000	7000	7000	35000	42500	57800	68900	33500
13	12000	8800	8000	7000	7000	7000	7000	29000	43300	58600	67500	32800
14	12000	8800	8000	7000	7000	7000	7200	27000	45300	57700	67700	32200
15	11000	8800	8000	7000	7000	7000	7400	26300	45500	56500	67400	32000
16	11000	8400	8000	7000	7000	7000	7600	25800	44300	58100	67200	33800
17	11000	8400	8000	7000	7000	7000	7800	25300	41800	67100	68100	34700
18	11000	8400	7600	7000	7000	7000	8000	24300	39400	69900	67800	33800
19	11000	8400	7600	7000	7000	7000	8200	23900	37900	70300	65000	32100
20	10000	8400	7600	7000	7000	7000	8600	23000	38000	69900	62500	31600
21	10000	8400	7600	7000	7000	7000	9000	22300	40600	69100	62000	32700
22	10000	8400	7600	7000	7000	7000	9400	22000	43100	68300	60800	33400
23	10000	8400	7600	7000	7000	7000	10000	21800	43700	70500	56300	32400
24	10000	8400	7600	7000	7000	7000	11000	21600	44400	72500	53000	31700
25	10000	8400	7600	7000	7000	7000	12000	21900	45000	72300	53500	30100
26	9600	8400	7600	7000	7000	7000	12000	22200	46000	75400	54600	28600
27	9600	8400	7600	7000	7000	7000	13000	23500	47500	79000	55600	26900
28	9600	8400	7600	7000	7000	7000	15000	25200	46100	78200	55400	25500
29	9600	8400	7600	7000	---	7000	18000	27000	45300	78200	54300	24500
30	9600	8400	7600	7000	---	7000	24000	28900	46600	78300	53900	23400
31	9600	---	7600	7000	---	7000	---	30000	---	76200	52500	---
TOTAL	380100	260400	244400	220300	196000	217000	279200	1103200	1226000	1970500	2050400	1025900
MEAN	12260	8680	7884	7106	7000	7000	9307	35590	40870	63560	66140	34200
MAX	17700	9200	8400	7300	7000	7000	24000	66600	47500	79000	79200	49100
MIN	9600	8400	7600	7000	7000	7000	7000	21600	34200	47100	52500	23400
CFSM	.40	.34	.31	.28	.27	.27	.36	1.39	1.60	2.48	2.58	1.34
IN.	.55	.38	.36	.32	.28	.32	.41	1.60	1.78	2.86	2.98	1.49
AC-FT	753900	516500	484800	437000	388800	430400	553800	2188000	2432000	3908000	4067000	2035000

CAL YR 1978 TOTAL 7394600 MEAN 20260 MAX 65700 MIN 6500 CFSM .79 IN 10.75 AC-FT 14670000
WTR YR 1979 TOTAL 9173400 MEAN 25130 MAX 79200 MIN 7000 CFSM .98 IN 13.33 AC-FT 18200000

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.13							---	5.70	7.39	10.19	7.15
2	---							8.00	5.78	7.44	10.36	6.92
3	3.05							9.57	5.73	7.30	10.41	6.62
4	2.87							9.32	5.74	7.24	10.48	6.26
5	2.83							9.14	5.83	7.49	10.39	5.96
6	---							9.08	---	8.03	10.20	5.78
7	2.63							8.72	6.01	8.52	10.05	5.70
8	2.48							8.22	6.10	8.66	10.04	5.64
9	2.41							7.67	6.18	8.60	9.97	5.59
10	2.31							7.10	6.25	8.42	9.76	5.51
11	2.12							6.71	6.50	8.26	9.56	5.41
12	2.07							---	6.75	8.36	9.35	5.29
13	---							---	6.85	8.43	9.20	5.21
14	---							---	7.09	8.31	9.23	5.14
15	---							4.62	7.12	8.16	9.19	5.13
16	---							4.54	6.97	8.32	9.16	5.37
17	---							4.46	6.66	9.30	9.26	5.50
18	---							4.28	6.37	9.59	9.23	5.39
19	---							4.21	6.17	9.62	8.93	5.18
20	---							4.07	6.18	9.55	8.65	5.12
21	---							3.95	6.51	9.45	8.60	5.29
22	---							3.89	6.82	9.35	8.47	5.39
23	---							3.85	6.90	9.57	7.98	5.27
24	---							3.82	6.98	9.77	7.62	5.11
25	---							3.88	7.07	9.74	7.67	4.97
26	---							3.93	7.19	10.07	7.79	4.77
27	---							4.16	7.37	10.45	7.90	4.54
28	---							4.44	7.20	10.36	7.88	4.33
29	---							4.71	7.10	10.37	7.76	4.17
30	---							4.98	7.24	10.38	7.72	4.00
31	---							5.15	---	10.14	7.55	---
MEAN	---							---	---	8.92	9.05	5.39
MAX	---							---	---	10.45	10.48	7.15
MIN	---							---	---	7.24	7.55	4.00

15515500 TANANA RIVER AT NENANA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954-56, 1963-64, 1966-75, and 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
MAR 26...	1345	6940	300	7.6	.0	4.3	9.1	14	5	150	27
APR 26...	1400	12400	260	7.8	.0	15	12.1	22	16	120	31
AUG 10...	1400	72400	200	--	16.0	76	9.0	K19	K40	94	12
10...	1700	72400	200	--	16.0	--	--	--	--	--	--
SEP 07...	1440	37100	230	7.3	9.0	110	11.1	22	10	110	26

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
MAR 26...	45	9.2	4.1	2.4	150	32	1.2	.2	13	182	181
APR 26...	35	7.5	3.6	2.1	107	31	1.2	.1	9.6	148	143
AUG 10...	28	5.8	4.8	2.1	100	31	1.2	.1	7.8	114	131
10...	--	--	--	--	--	--	--	--	--	--	--
SEP 07...	31	6.7	4.1	1.8	102	31	1.6	.1	9.4	140	137

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
MAR 26...	.20	--	.04	.27	.31	.15	.16	.51	--	.01	.01
APR 26...	.15	--	.01	.13	.14	.01	.13	.29	--	.10	.00
AUG 10...	.08	--	.03	.77	.80	.20	.60	.88	--	.08	.00
10...	--	--	--	--	--	--	--	--	--	--	--
SEP 07...	.14	.14	.01	.75	.76	.33	.43	.90	.57	.24	.01

DATE	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)
MAR 26...	1	--	0	0	0	0	1	1	0	10	10
APR 26...	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	16	--	1	300	300	50	1	0	6	40	40
10...	--	--	--	--	--	--	--	--	--	--	--
SEP 07...	9	8	1	0	0	40	2	0	4	20	20

K NON-IDEAL COLONY COUNT

15515500 TANANA RIVER AT NENANA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
MAR 26...	0	0	0	0	7	7	0	800	770	30	30
APR 26...	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	0	16	12	4	37	30	7	40000	40000	290	5
10...	--	--	--	--	--	--	--	--	--	--	--
SEP 07...	0	7	4	<3	28	26	2	14000	--	10	27

DATE	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)
MAR 26...	27	3	100	20	80	.0	.0	.0	1	0	1
APR 26...	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	0	10	940	920	20	.1	.1	.0	1	1	0
10...	--	--	--	--	--	--	--	--	--	--	--
SEP 07...	0	33	320	300	20	.1	.1	.0	1	1	0

DATE	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAR 26...	0	0	0	20	10	10	1.5	.1	19	356	--
APR 26...	--	--	--	--	--	--	--	--	138	4620	--
AUG 10...	0	0	0	110	60	50	5.5	1.6	2600	508000	60
10...	--	--	--	--	--	--	--	--	--	--	--
SEP 07...	0	0	0	20	20	<3	3.2	--	823	82400	50

15515500 TANANA RIVER AT NENANA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO SEPTEMBER 1979

DATE	MAR 26.79	APR 26.79	AUG 10.79	SEP 7.79
TIME	1345	1400	1400	1440
TOTAL CELLS/ML	0	0	0	170
DIVERSITY: DIVISION	0.0	0.0	0.0	1.2
.CLASS	0.0	0.0	0.0	1.2
..ORDER	0.0	0.0	0.0	1.2
...FAMILY	0.0	0.0	0.0	1.4
....GENUS	0.0	0.0	0.0	1.4

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..PENNALES								
...DIATOMACEAE								
....DIATOMA	--	-	--	-	--	-	14	8
...NITZSCHIACEAE								
....NITZSCHIA	--	-	--	-	--	-	29#	17
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..HORMOGONALES								
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	--	-	--	-	110#	67
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....TRACHELOMONAS	--	-	--	-	--	-	14	8

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

15518000 NENANA RIVER NEAR HEALY

LOCATION.--Lat 63°50'43", long 148°56'37", in NW¼ sec.28, T.12 S., R.7 W., Hydrologic Unit 19030004, on left bank 0.5 mi (0.8 km) upstream from Healy Creek, 1.1 mi (1.8 km) southeast of Healy, and 1.2 mi (1.9 km) upstream from railroad bridge.

DRAINAGE AREA.--1,910 mi² (4,950 km²), approximately.

PERIOD OF RECORD.--October 1950 to September 1979 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,270.22 ft (387.163 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 11, 1964, water-stage recorder 200 ft (61 m) downstream at same datum. Aug. 12, 1964 to Feb. 21, 1967, water-stage recorder, and Feb. 22, 1967 to Apr. 2, 1970, nonrecording gage 300 ft (91 m) upstream at same datum.

REMARKS.--Records fair, except those for period of no gage-height record, Oct. 23 to May 7, which are estimated and poor. Some diurnal fluctuation at times each year caused by snowmelt at the source. Release of water from glacier dammed lake on Yanert Glacier about 50 mi (80 km) upstream has periodically augmented flows at station.

AVERAGE DISCHARGE.--29 years, 3,506 ft³/s (99.29 m³/s), 24.93 in/yr (633 mm/yr), 2,540,000 acre-ft/yr (3.13 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,800 ft³/s (1,330 m³/s) July 25, 1967, gage height, 13.40 ft (4.084 m), from floodmarks; minimum daily, 190 ft³/s (5.4 m³/s) Feb. 1 to Apr. 19, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 17,400 ft³/s (493 m³/s) July 26, gage height, 8.85 ft (2.698 m); minimum daily, 450 ft³/s (13 m³/s) Mar. 1 to Apr. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2280	1200	760	600	500	450	450	2500	6620	8600	8990	3660
2	2220	1200	760	600	500	450	450	3400	7700	8930	8510	3560
3	2140	1100	760	600	500	450	450	4000	8180	9440	8180	3540
4	2180	1100	760	600	500	450	450	4800	7490	9620	8060	3460
5	2320	1100	760	600	500	450	450	5300	7730	10600	8000	3300
6	2440	1100	760	600	500	450	450	4000	7910	11400	7460	3180
7	2480	1000	760	600	500	450	450	3900	7910	11100	7970	3160
8	2600	1000	760	600	500	450	450	3720	7160	9830	8420	3160
9	2640	1000	760	600	500	450	450	3420	7400	9080	8210	3200
10	2540	1000	760	600	500	450	450	3160	8450	8930	7730	3160
11	2380	900	700	600	500	450	450	3140	8390	9200	7280	3140
12	2240	900	700	600	500	450	450	3240	8060	8870	6920	3120
13	2100	900	700	600	500	450	450	3540	6440	8480	6860	3180
14	2000	900	700	600	500	450	450	3940	5810	8630	6680	3480
15	1960	900	700	600	500	450	450	4100	5210	8660	7310	4100
16	1680	900	700	600	500	450	450	4280	5420	10700	7340	4180
17	1610	900	700	600	500	450	450	4240	5690	11200	7160	4140
18	1790	900	700	600	500	450	450	4080	5990	10800	5990	3940
19	1790	900	700	600	500	450	450	4220	6200	9980	5690	4300
20	1660	900	700	600	500	450	450	4280	6710	9530	6260	5900
21	1580	800	660	540	500	450	460	4580	7520	9140	6110	6830
22	1400	800	660	540	500	450	470	4820	7820	9920	5240	6620
23	1400	800	660	540	500	450	490	5000	7760	11200	5060	6170
24	1300	800	660	540	500	450	500	5630	7730	10600	5330	6110
25	1300	800	660	540	500	450	540	5570	8000	12200	5630	5360
26	1300	800	660	540	500	450	600	6080	9770	15600	5510	4760
27	1300	800	660	540	500	450	700	7640	9230	13200	5300	4420
28	1200	800	660	540	500	450	800	8090	8720	11200	4640	4160
29	1200	800	660	540	---	450	1000	8060	9080	10200	4600	3940
30	1200	800	660	540	---	450	1500	7760	8720	9560	4340	3720
31	1200	---	660	540	---	450	---	6740	---	9290	3920	---
TOTAL	57430	27800	21860	17940	14000	13950	16060	147230	224820	315690	204700	124950
MEAN	1853	927	705	579	500	450	535	4749	7494	10180	6603	4165
MAX	2640	1200	760	600	500	450	1500	8090	9770	15600	8990	6830
MIN	1200	800	660	540	500	450	450	2500	5210	8480	3920	3120
CFSM	.97	.49	.37	.30	.26	.24	.28	2.49	3.92	5.33	3.46	2.18
IN.	1.12	.54	.43	.35	.27	.27	.31	2.87	4.38	6.15	3.99	2.43
AC-FT	113900	55140	43360	35580	27770	27670	31860	292000	445900	626200	406000	247800

CAL YR 1978 TOTAL 1090310 MEAN 2987 MAX 10600 MIN 500 CFSM 1.56 IN 21.24 AC-FT 2163000
WTR YR 1979 TOTAL 1186430 MEAN 3250 MAX 15600 MIN 450 CFSM 1.70 IN 23.11 AC-FT 2353000

15535000 CARIBOU CREEK NEAR CHATANIKA

LOCATION.-Lat 65°09'00", long 147°33'05", in NW¼NE¼ sec.28, T.4 N., R.1 E., Fairbanks North Star Borough, Hydrologic Unit 19030004, on left bank 2.0 mi (3.2 km) upstream from mouth, 3.5 mi (5.6 km) northwest of Chatanika, and 21.6 mi (34.8 km) north of Fairbanks.

DRAINAGE AREA.--9.19 mi² (23.8 km²).

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 870 ft (270 m), from topographic map.

REMARKS.--Records estimated and poor for period of no gage-height record prior to May 24, fair thereafter. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--10 years, 4.77 ft³/s (0.135 m³/s), 7.05 in/yr (179 mm/yr), 3,460 acre-ft/yr (4.27 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 117 ft³/s (3.31 m³/s) May 12, 1975, gage height, 5.47 ft (1.667 m), flow over ice; no flow Dec. 11, 1975 to Apr. 4, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 60 ft³/s (1.70 m³/s) May 2 to 4, flow over ice; minimum daily, 1.0 ft³/s (0.03 m³/s) Mar. 3 to Apr. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	2.0	2.4	2.0	1.5	1.5	1.0	50	3.6	7.4	7.9	5.6
2	4.4	2.0	2.4	2.0	1.5	1.5	1.0	60	3.6	5.6	7.9	5.4
3	4.2	2.0	2.4	2.0	1.5	1.0	1.0	60	3.6	4.8	7.9	5.2
4	4.1	2.0	2.4	2.0	1.5	1.0	1.0	60	3.6	4.8	7.4	5.2
5	3.9	2.0	2.4	2.0	1.5	1.0	1.0	50	3.4	6.1	7.6	5.0
6	3.8	2.0	2.4	2.0	1.5	1.0	1.0	45	8.3	23	7.6	4.8
7	3.7	2.0	2.4	2.0	1.5	1.0	1.0	40	11	20	7.4	4.6
8	3.6	2.0	2.4	2.0	1.5	1.0	1.0	30	6.4	14	7.1	4.3
9	3.5	2.0	2.4	2.0	1.5	1.0	1.0	25	5.0	14	6.8	4.1
10	3.4	2.0	2.4	2.0	1.5	1.0	1.0	20	4.6	11	6.4	4.1
11	3.4	2.2	2.4	2.0	1.5	1.0	1.0	20	9.0	9.3	6.4	3.9
12	3.3	2.2	2.4	2.0	1.5	1.0	1.0	15	11	7.9	6.1	4.1
13	3.3	2.2	2.4	2.0	1.5	1.0	1.0	15	11	7.1	5.6	4.1
14	3.2	2.2	2.2	2.0	1.5	1.0	1.5	10	7.6	6.8	5.6	4.1
15	3.2	2.2	2.2	2.0	1.5	1.0	1.5	10	6.8	6.4	5.6	4.1
16	3.2	2.2	2.2	2.0	1.5	1.0	1.5	9.0	5.6	6.4	5.4	4.1
17	3.2	2.2	2.2	2.0	1.5	1.0	1.5	8.0	5.6	6.4	5.2	4.1
18	3.2	2.2	2.2	2.0	1.5	1.0	1.5	7.0	5.6	6.1	5.2	3.9
19	3.2	2.2	2.2	2.0	1.5	1.0	1.5	6.0	5.0	5.9	5.0	3.7
20	2.8	2.2	2.2	2.0	1.5	1.0	1.5	5.4	5.9	5.6	5.0	3.9
21	2.8	2.4	2.2	2.0	1.5	1.0	1.5	4.8	7.9	5.4	5.0	3.9
22	2.8	2.4	2.2	2.0	1.5	1.0	2.0	4.4	6.1	7.9	4.8	3.9
23	2.8	2.4	2.2	2.0	1.5	1.0	2.0	4.0	5.2	10	4.6	3.9
24	2.8	2.4	2.2	2.0	1.5	1.0	2.0	4.0	4.8	8.2	4.3	3.9
25	2.8	2.4	2.2	2.0	1.5	1.0	2.0	4.1	4.8	8.2	4.3	3.9
26	2.4	2.4	2.2	2.0	1.5	1.0	3.0	4.8	5.0	13	4.3	3.9
27	2.4	2.4	2.2	2.0	1.5	1.0	6.0	5.2	4.6	13	4.3	3.9
28	2.4	2.4	2.2	2.0	1.5	1.0	15	4.6	4.8	10	4.6	3.7
29	2.4	2.4	2.2	2.0	---	1.0	25	4.1	12	9.3	4.6	3.6
30	2.4	2.4	2.2	2.0	---	1.0	40	4.1	12	8.4	5.9	3.6
31	2.4	---	2.2	2.0	---	1.0	---	3.9	---	7.9	6.1	---
TOTAL	99.6	66.0	70.8	62.0	42.0	32.0	122.0	593.4	193.4	279.9	181.9	126.5
MEAN	3.21	2.20	2.28	2.00	1.50	1.03	4.07	19.1	6.45	9.03	5.87	4.22
MAX	4.6	2.4	2.4	2.0	1.5	1.5	40	60	12	23	7.9	5.6
MIN	2.4	2.0	2.2	2.0	1.5	1.0	1.0	3.9	3.4	4.8	4.3	3.6
CFSM	.35	.24	.25	.22	.16	.11	.44	2.08	.70	.98	.64	.46
IN.	.40	.27	.29	.25	.17	.13	.49	2.40	.78	1.13	.74	.51
AC-FT	198	131	140	123	83	63	242	1180	384	555	361	251

CAL YR 1978 TOTAL 1091.2 MEAN 2.99 MAX 23 MIN 1.5 CFSM .33 IN 4.42 AC-FT 2160
WTR YR 1979 TOTAL 1869.5 MEAN 5.12 MAX 60 MIN 1.0 CFSM .56 IN 7.57 AC-FT 3710

15564900 KOYUKUK RIVER AT HUGHES

LOCATION.--Lat 66°02'51", long 154°15'30", in SE¼SE¼ sec.33, T.8 N., R.22 E., Hydrologic Unit 19030005, on left bank at north end of runway at Hughes and 0.6 mi (1.0 km) upstream from Hughes Creek.

DRAINAGE AREA.--18,700 mi^2 (48,400 km^2), approximately.

PERIOD OF RECORD.--June 1960 to current year.

REVISED RECORDS.--WSP 1936: 1960.

GAGE.--Nonrecording gage read twice daily. Altitude of gage is 250 ft (76 m), from topographic map. Prior to Sept. 30, 1960, on right bank at same datum.

REMARKS.--Records fair except those for period of no gage-height record, Oct. 5 to May 10, which are estimated and poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--19 years, 14,080 ft^3/s (398.8 m^3/s), 10.22 in/yr (260 mm/yr), 10,200,000 acre-ft/yr (12.6 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 266,000 ft^3/s (7,530 m^3/s) June 6, 1964, gage height, 31.09 ft (9.476 m); maximum gage height, 34.33 ft (10.464 m) May 26, 1965, from floodmarks, backwater from ice; minimum daily discharge, 200 ft^3/s (5.7 m^3/s) Apr. 1-15, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 1937 reached a stage of about 34 ft (10.4 m), from information by local residents.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 91,000 ft^3/s (2,600 m^3/s) May 10; maximum gage height, 23.73 ft (7.233 m) about May 8, backwater from ice; minimum daily discharge, 520 ft^3/s (15.0 m^3/s) Mar. 21 to Apr. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUFS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10000	3000	1800	1300	700	700	520	800	33500	28900	25900	20800
2	8580	3000	1800	1300	700	700	520	900	27100	24100	20800	22300
3	7060	3000	1800	1300	700	700	520	1000	26500	21800	17800	21800
4	4720	3000	1800	1300	700	700	520	2000	32100	19800	15300	20300
5	4000	3000	1800	1300	700	700	520	3000	36300	19300	13800	19300
6	4000	2300	1800	1300	700	700	520	10000	37000	19300	13400	17300
7	4000	2300	1800	1300	700	700	520	20000	37700	19800	13400	16300
8	4000	2300	1800	1300	700	700	520	35000	35600	21300	17800	14800
9	4000	2300	1800	1300	700	700	520	80000	34200	28300	25300	13800
10	4000	2300	1800	1300	700	700	520	91000	37000	28900	25300	13000
11	3000	2300	1800	1000	700	700	520	85300	37000	27700	24700	12200
12	3000	2300	1800	1000	700	700	520	77300	53900	25900	17300	11800
13	3000	2300	1800	1000	700	700	520	75300	71300	22900	17300	11000
14	3000	2300	1800	1000	700	700	520	75300	53900	22300	16800	10600
15	3000	2300	1800	1000	700	700	520	73300	38400	20300	15800	10200
16	3000	2300	1800	1000	700	700	520	69300	28900	18300	14800	9830
17	3000	2300	1800	1000	700	700	520	63800	22900	16300	14800	9470
18	3000	2300	1800	1000	700	700	520	62900	19800	15300	13800	9110
19	3000	2300	1800	1000	700	700	520	65600	19300	14800	13800	8750
20	3000	2300	1800	1000	700	700	520	65600	21800	14300	13800	8400
21	3000	2300	1300	1000	700	520	520	65600	23500	13400	13800	8400
22	3000	2300	1300	1000	700	520	520	62000	22300	13000	14300	8750
23	3000	2300	1300	1000	700	520	520	54800	20800	12200	15800	10200
24	3000	2300	1300	1000	700	520	540	53900	20300	11800	14800	12600
25	3000	2300	1300	1000	700	520	560	53100	18800	11400	17800	14300
26	3000	2300	1300	1000	700	520	580	53900	20300	11400	17300	15800
27	3000	2300	1300	1000	700	520	590	60200	39800	11400	16300	16300
28	3000	2300	1300	1000	700	520	600	61100	45100	11800	15800	15800
29	3000	2300	1300	1000	---	520	640	53900	37700	13000	16300	14300
30	3000	2300	1300	1000	---	520	700	45900	32800	24700	17300	13400
31	3000	---	1300	1000	---	520	---	39800	---	31400	18800	---
TOTAL	117360	72500	50300	34000	19600	19720	16170	1561600	985600	595100	530000	410910
MEAN	3786	2417	1623	1097	700	636	539	50370	32850	19200	17100	13700
MAX	10000	3000	1800	1300	700	700	700	91000	71300	31400	25900	22300
MIN	3000	2300	1300	1000	700	520	520	800	18800	11400	13400	8400
CFSM	.20	.13	.09	.06	.04	.03	.03	2.69	1.76	1.03	.91	.73
IN.	.23	.14	.10	.07	.04	.04	.03	3.11	1.96	1.18	1.05	.82
AC-FT	232800	143800	99770	67440	38880	39110	32070	3097000	1955000	1180000	1051000	815000

CAL YR 1978 TOTAL 4275660 MEAN 11710 MAX 65200 MIN 460 CFSM .63 IN 8.51 AC-FT 8481000
WTR YR 1979 TOTAL 4412860 MEAN 12090 MAX 91000 MIN 520 CFSM .65 IN 8.78 AC-FT 8753000

15565235 OPHIR CREEK NEAR TAKOTNA

LOCATION.--Lat 63°08'42", long 156°31'15", in SE¼SW¼ sec.14, T.27 S., R.12 E., Hydrologic Unit 19030006, on right bank 25 ft (7.6 m) downstream from road crossing between airstrip and old town of Ophir, 500 ft (150 m) upstream from mouth, and 20 mi (32 km) northwest of Takotna.

DRAINAGE AREA.--6.19 mi^2 (16.03 km^2).

PERIOD OF RECORD.--August 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 580 ft (177 m), from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 360 ft^3/s (10.2 m^3/s) May 18, 1977, gage height, 4.70 ft (1.433 m), from rating curve extended above 10 ft^3/s (0.3 m^3/s), on basis of slope-conveyance study; no flow at times during most winter months.

EXTREMES FOR CURRENT YEAR.--Maximum discharge recorded, 23 ft^3/s (0.65 m^3/s) July 11, gage height, 2.14 ft (0.652 m), from rating curve extended as explained above, but may have been greater during period of no gage-height record in May; no flow Jan. 11 to Apr. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	.90	.30	.10	.00	.00	.00	9.0	7.2	13	5.4	6.1
2	3.0	.90	.30	.10	.00	.00	.00	10	6.9	11	5.2	5.8
3	3.0	.90	.30	.10	.00	.00	.00	10	6.7	9.6	5.4	5.8
4	2.5	.90	.30	.10	.00	.00	.00	10	6.7	8.4	6.7	5.6
5	2.5	.80	.30	.10	.00	.00	.00	10	6.7	7.6	6.9	5.4
6	2.5	.80	.30	.10	.00	.00	.00	10	6.5	7.4	6.7	5.4
7	2.5	.80	.30	.10	.00	.00	.00	10	6.3	7.2	6.3	5.4
8	2.0	.80	.20	.10	.00	.00	.00	10	6.1	6.7	5.8	5.8
9	2.0	.70	.20	.10	.00	.00	.00	10	8.4	6.9	5.8	6.1
10	2.0	.70	.20	.10	.00	.00	.00	10	7.9	7.9	5.6	5.8
11	2.0	.70	.20	.00	.00	.00	.00	9.0	7.6	20	5.2	6.1
12	2.0	.70	.20	.00	.00	.00	.00	9.0	6.9	18	5.0	5.8
13	2.0	.60	.20	.00	.00	.00	.00	9.0	6.7	14	4.8	5.6
14	2.0	.60	.20	.00	.00	.00	.00	9.0	7.9	12	4.6	5.6
15	2.0	.60	.20	.00	.00	.00	.00	9.0	8.2	11	4.6	5.6
16	2.0	.60	.20	.00	.00	.00	.00	8.0	7.6	9.6	4.6	5.4
17	2.0	.50	.20	.00	.00	.00	.00	8.0	10	9.0	4.6	5.4
18	1.5	.50	.20	.00	.00	.00	.00	8.0	11	8.4	4.6	5.2
19	1.5	.50	.20	.00	.00	.00	.00	8.0	9.6	7.9	4.6	5.2
20	1.5	.50	.20	.00	.00	.00	.00	8.0	9.6	7.6	5.0	5.0
21	1.5	.40	.10	.00	.00	.00	.10	8.0	11	7.4	5.8	5.2
22	1.5	.40	.10	.00	.00	.00	.20	8.0	11	6.9	5.8	5.2
23	1.5	.40	.10	.00	.00	.00	.50	8.0	9.3	6.7	6.1	5.6
24	1.5	.40	.10	.00	.00	.00	.70	8.0	8.4	6.7	6.5	6.1
25	1.5	.40	.10	.00	.00	.00	1.0	8.0	7.9	6.5	6.7	5.8
26	1.0	.40	.10	.00	.00	.00	1.5	7.5	7.2	6.3	6.7	6.1
27	1.0	.40	.10	.00	.00	.00	2.0	7.5	7.4	6.1	6.5	6.1
28	1.0	.40	.10	.00	.00	.00	5.0	7.5	8.4	5.8	6.7	6.3
29	1.0	.30	.10	.00	---	.00	7.0	7.5	8.7	5.8	6.7	6.1
30	1.0	.30	.10	.00	---	.00	8.0	7.5	9.3	5.6	6.7	6.1
31	1.0	---	.10	.00	---	.00	---	7.5	---	5.4	6.5	---
TOTAL	57.0	17.80	5.80	1.00	.00	.00	26.00	269.0	243.1	272.4	178.1	170.7
MEAN	1.84	.59	.19	.032	.000	.000	.87	8.68	8.10	8.79	5.75	5.69
MAX	3.0	.90	.30	.10	.00	.00	8.0	10	11	20	6.9	6.3
MIN	1.0	.30	.10	.00	.00	.00	.00	7.5	6.1	5.4	4.6	5.0
CFSM	.30	.10	.03	.005	.000	.000	.14	1.40	1.31	1.42	.93	.92
IN.	.34	.11	.03	.01	.00	.00	.16	1.62	1.46	1.64	1.07	1.03
AC-FT	113	35	12	2.0	.00	.00	52	534	482	540	353	339

CAL YR 1978 TOTAL 971.40 MEAN 2.66 MAX 38 MIN .00 CFSM .43 IN 5.84 AC-FT 1930
WTR YR 1979 TOTAL 1240.90 MEAN 3.40 MAX 20 MIN .00 CFSM .55 IN 7.46 AC-FT 2460

NOTE.--No gage-height record Oct. 1 to May 31.

15565447 YUKON RIVER AT PILOT STATION

(National stream-quality accounting, pesticide, and radiochemical networks station)

LOCATION.--Lat 61°56'04", long 162°52'50", in SW¼SE¼ sec.5, T.21 N., R.74 W., Hydrologic Unit 19030006, on right bank 0.2 mi (0.3 km) downstream from village of Pilot Station, 2.4 mi (3.9 km) downstream from Atchuelinguk River, and 19 mi (31 km) upstream from Andreafsky River.

DRAINAGE AREA.--321,000 mi² (831,000 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 20 ft (6 m), from topographic map.

REMARKS.-Records poor for periods of no gage-height record prior to June 20 and after Sept. 12, fair otherwise.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 700,000 ft³/s (19,800 m³/s) May 23, 1976; maximum gage height, 30.2 ft (9.20 m) about May 23, 1976, from floodmarks, backwater from ice; minimum daily discharge, about 37,000 ft³/s (1,000 m³/s) Apr. 11-26, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 587,000 ft³/s (16,600 m³/s), occurred sometime during period May 14-16, gage height, 24.05 ft (7.330 m) from floodmarks; minimum daily, about 40,000 ft³/s (1,130 m³/s) Apr. 14-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230000	120000	80000	65000	60000	55000	45000	45000	540000	480000	447000	393000
2	220000	120000	80000	65000	60000	55000	45000	45000	540000	480000	444000	388000
3	220000	120000	80000	65000	60000	55000	45000	50000	540000	480000	441000	382000
4	210000	120000	75000	65000	60000	55000	45000	50000	540000	480000	440000	376000
5	210000	110000	75000	60000	60000	55000	45000	55000	540000	480000	439000	368000
6	210000	110000	75000	60000	55000	55000	45000	60000	540000	470000	440000	360000
7	200000	110000	75000	60000	55000	55000	45000	65000	540000	464000	442000	356000
8	200000	110000	75000	60000	55000	55000	45000	80000	540000	465000	444000	352000
9	190000	110000	70000	60000	55000	55000	45000	100000	540000	468000	446000	347000
10	190000	100000	70000	60000	55000	55000	45000	150000	540000	470000	447000	341000
11	190000	100000	70000	60000	55000	50000	45000	200000	540000	471000	448000	332000
12	180000	100000	70000	60000	55000	50000	45000	300000	540000	472000	448000	330000
13	180000	100000	70000	60000	55000	50000	45000	500000	540000	472000	449000	330000
14	170000	100000	70000	60000	55000	50000	40000	550000	540000	471000	450000	330000
15	170000	100000	70000	60000	55000	50000	40000	580000	540000	470000	450000	320000
16	160000	95000	70000	60000	55000	50000	40000	570000	540000	469000	450000	320000
17	160000	95000	65000	60000	55000	50000	40000	550000	540000	469000	451000	320000
18	160000	95000	65000	60000	55000	50000	40000	500000	540000	468000	451000	320000
19	160000	95000	65000	60000	55000	50000	40000	450000	540000	468000	450000	320000
20	150000	90000	65000	60000	55000	50000	40000	450000	540000	468000	450000	310000
21	150000	90000	65000	60000	55000	50000	40000	450000	532000	469000	440000	310000
22	150000	90000	65000	60000	55000	50000	40000	500000	529000	468000	440000	310000
23	150000	90000	65000	60000	55000	50000	40000	550000	526000	467000	440000	300000
24	140000	90000	65000	60000	55000	50000	40000	560000	523000	465000	440000	300000
25	140000	84000	65000	60000	55000	50000	40000	560000	520000	464000	430000	290000
26	140000	84000	65000	60000	55000	50000	40000	560000	520000	462000	430000	280000
27	140000	84000	65000	60000	55000	50000	40000	560000	508000	461000	432000	270000
28	130000	84000	65000	60000	55000	45000	40000	560000	501000	459000	422000	270000
29	130000	80000	65000	60000	---	45000	40000	560000	493000	456000	415000	270000
30	130000	80000	65000	60000	---	45000	40000	560000	484000	453000	405000	270000
31	130000	---	65000	60000	---	45000	---	560000	---	450000	398000	---
TOTAL	5290000	2956000	2150000	1860000	1565000	1580000	1265000	11330000	15936000	14509000	13619000	9765000
MEAN	170600	98530	69350	60650	55890	50970	42170	365500	531200	468000	439300	325500
MAX	230000	120000	80000	65000	60000	55000	45000	580000	540000	480000	451000	393000
MIN	130000	80000	65000	60000	55000	45000	40000	45000	484000	450000	398000	270000
CFSM	.53	.31	.22	.19	.17	.16	.13	1.14	1.66	1.46	1.37	1.01
IN.	.61	.34	.25	.22	.18	.18	.15	1.31	1.85	1.68	1.58	1.13
AC-FT	10490000	5863000	4265000	3729000	3104000	3134000	2509000	22470000	31610000	28780000	27010000	19370000

CAL YR 1978 TOTAL 64031900 MEAN 175400 MAX 463000 MIN 42000 CFSM .55 IN 7.42 AC-FT 127000000
WTR YR 1979 TOTAL 81845000 MEAN 224200 MAX 580000 MIN 40000 CFSM .70 IN 9.48 AC-FT 162300000

15565447 YUKON RIVER AT PILOT STATION--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954-56, 1975 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SAMP- LING DEPTH (FT)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	STREAM VELOC- ITY, POINT (FPS)	PER- CENT OF TOTAL DEPTH	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
FEB								
27...	1431	1950	--	--	--	--	290	7.1
27...	1432	1500	--	--	--	--	297	7.1
27...	1433	950	--	--	--	--	297	7.0
JUL								
12...	1701	800	--	40.0	2.50	--	--	--
12...	1705	800	.5	40.0	--	--	185	7.3
12...	1706	1200	--	38.0	3.40	--	--	--
12...	1707	1200	8.0	38.0	3.70	20	--	--
12...	1708	1200	23	38.0	--	60	--	--
12...	1709	1200	30	38.0	3.10	80	--	--
12...	1710	1200	.5	38.0	--	--	180	7.3
12...	1711	1500	--	44.0	4.40	--	--	--
12...	1715	1500	.5	44.0	--	--	185	7.4
12...	1716	1700	--	46.0	3.90	--	--	--
12...	1720	1700	.5	46.0	--	--	185	7.4
12...	1721	1950	--	55.0	4.30	--	--	--
12...	1725	1950	.5	55.0	--	--	185	7.3
12...	1726	2100	--	E63.0	E4.60	--	--	--
12...	1727	2100	11	E63.0	E5.40	20	--	--
12...	1728	2100	33	E63.0	--	60	--	--
12...	1729	2100	44	E63.0	E3.80	80	--	--
12...	1730	2100	.5	E63.0	--	--	185	7.3
12...	1731	2250	--	70.0	3.30	--	--	--
12...	1735	2250	.5	70.0	--	--	180	7.4
12...	1736	2350	--	70.0	5.20	--	--	--
12...	1740	2350	.5	70.0	--	--	180	7.4
12...	1741	2450	--	E70.0	E5.60	--	--	--
12...	1742	2450	14	E70.0	--	20	--	--
12...	1743	2450	42	E70.0	--	60	--	--
12...	1744	2450	56	E70.0	--	80	--	--
12...	1745	2450	.5	E70.0	--	--	180	7.4
12...	1746	2600	--	E60.0	E3.80	--	--	--
12...	1750	2600	.5	E60.0	--	--	175	7.4

DATE	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	BICAR- BONATE (MG/L AS HCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	SEDI- MENT, SUS- PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
FEB							
27...	.0	3.2	--	--	--	--	--
27...	.0	3.2	--	--	--	--	--
27...	.0	3.1	--	--	--	--	--
JUL							
12...	--	--	88	24	8800	266	86
12...	--	9.2	--	--	--	--	--
12...	--	--	88	25	8300	425	66
12...	--	--	89	24	--	387	72
12...	--	--	89	24	10000	540	55
12...	--	--	89	18	10000	608	51
12...	--	9.3	--	--	--	--	--
12...	--	--	88	25	8300	463	60
12...	--	9.2	--	--	--	--	--
12...	--	--	89	20	8500	376	63
12...	--	9.3	--	--	--	--	--
12...	--	--	--	--	8300	303	76
12...	--	9.4	--	--	--	--	--
12...	--	--	90	19	7400	374	68
12...	--	--	--	--	7300	332	80
12...	--	--	88	23	8500	444	60
12...	--	--	88	23	8300	682	51
12...	--	9.3	--	--	--	--	--
12...	--	--	89	17	6000	285	79
12...	--	9.2	--	--	--	--	--
12...	--	--	88	19	--	318	74
12...	15.2	9.2	--	--	--	--	--
12...	--	--	90	20	9000	354	69
12...	--	--	89	23	--	275	85
12...	--	--	89	23	6500	286	83
12...	--	--	89	24	5800	317	76
12...	15.0	9.2	--	--	--	--	--
12...	--	--	90	18	8500	238	85
12...	15.0	9.2	--	--	--	--	--

E ESTIMATED

15565447 YUKON RIVER AT PILOT STATION--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM WIDTH (FT)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TURBIDITY (NTU)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
FEB 27...	1430	2200	54400	--	--	4.2	<1	<1	160	23	47	10
JUL 12...	1700	2798	423000	180	7.4	87	<1	<1	83	10	24	5.5

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
FEB 27...	3.0	1.1	167	0	24	1.1	.1	12	188	181	.23	.06
JUL 12...	2.5	1.1	88	0	21	.9	.1	6.6	111	105	.08	.05

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)
FEB 27...	.13	.19	.02	.17	.42	.04	.01	1	1	0	0	0
JUL 12...	.38	.43	.38	.05	.51	.35	.02	5	1	100	50	50

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)
FEB 27...	1	0	1	10	10	0	2	2	0	5	4	1
JUL 12...	1	0	2	20	10	10	5	2	<3	21	18	3

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)
FEB 27...	1300	1300	30	0	140	30	110	.1	.1	.0	1	1
JUL 12...	11000	11000	90	4	240	240	1	.2	.2	.0	0	0

DATE	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, DISSOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)
FEB 27...	0	1	1	0	20	0	20	<2.8	--	<.4	--
JUL 12...	0	0	0	0	50	50	4	1.6	1.1	14	9.5

15565447 YUKON RIVER AT PILOT STATION--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM DIS- SOLVED, EXTRAC- TION (UG/L)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
FEB 27...	1.3	<.4	1.2	<.4	.06	1.0	2.9	1.5	3	461	--
JUL 12...	1.5	6.9	1.4	6.1	.04	.70	4.8	1.4	338	386000	71

DATE	TIME	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- AZINON, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)
FEB 27...	1430	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
JUL 12...	1700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA- THION, TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOTAL TRI- THION (UG/L)
FEB 27...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
JUL 12...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO JULY 1979

DATE	FEB 27,79	JUL 12,79
TIME	1430	1700
TOTAL CELLS/ML	260	130
DIVERSITY: DIVISION	0.9	0.0
.CLASS	0.9	0.0
..ORDER	0.9	1.0
...FAMILY	0.9	1.0
....GENUS	0.0	1.0

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)				
.CHLOROPHYCEAE				
..CHLOROCOCCALES				
...OOCYSTACEAE				
....ANKISTRODESMUS	43#	17	--	-
CHRYSOPHYTA				
.BACILLARIOPHYCEAE				
..CENTRALES				
...COSCINODISCACEAE				
....CYCLOTELLA	--	-	65#	50
..PENNALES				
...NAVICULACEAE				
....NAVICULA	14	6	--	-
...NITZSCHIACEAE				
....NITZSCHIA	--	-	65#	50
CYANOPHYTA (BLUE-GREEN ALGAE)				
.CYANOPHYCEAE				
..HORMOGONALES				
...OSCILLATORIACEAE	200#	78	--	-

NOTE: # DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%
ND MATERIAL SPECIFICALLY ANALYZED FOR BUT NOT DETECTED

15621000 SNAKE RIVER NEAR NOME

LOCATION.--Lat 64°33'51", long 165°30'26", in SE¼ sec.5, T.11 S., R.34 W., Hydrologic Unit 19020002, on downstream side of bridge on Nome-Teller Highway, 5.4 mi (8.7 km) northwest of Nome.

DRAINAGE AREA.--85.7 mi^2 (222 km^2), approximately.

PERIOD OF RECORD.--September 1965 to current year.

GAGE.--Nonrecording gage. Datum of gage is 8.58 ft (2.615 m) National Geodetic Vertical Datum of 1929 (USC&GS data furnished by Alaska Department of Transportation, Nome). Prior to July 12, 1979, water-stage recorder at same site and datum.

REMARKS.--Records good except those for period of no gage-height record, Oct. 11 to June 13, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--14 years, 185 ft^3/s (5.239 m^3/s), 29.23 in/yr (742 mm/yr), 134,000 acre-ft/yr (165 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,200 ft^3/s (119 m^3/s) June 2, 1966, gage height, 11.90 ft (3.627 m); maximum gage height, 13.59 ft (4.142 m) May 15, 1975, backwater from ice; minimum daily discharge, about 1.0 ft^3/s (0.03 m^3/s) Feb. 25 to May 15, 1971, but may be no flow at times during some winters.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,020 ft^3/s (57.2 m^3/s) June 19, gage height, 9.53 ft (2.905 m); maximum gage height, 10.98 ft (3.347 m), from floodmarks, backwater from ice; minimum daily discharge, about 40 ft^3/s (1.1 m^3/s) Feb. 26 to Apr. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	536	130	90	60	50	40	40	46	500	616	276	609
2	482	130	90	60	50	40	40	48	800	491	274	578
3	440	130	90	60	50	40	40	48	1000	824	282	509
4	408	130	90	60	50	40	40	50	1500	728	724	468
5	378	120	90	60	50	40	40	52	2000	824	702	428
6	358	120	85	60	45	40	40	52	1500	760	602	418
7	342	120	85	60	45	40	40	54	1200	672	595	465
8	325	120	85	60	45	40	40	56	1000	616	609	392
9	310	110	85	60	45	40	40	58	800	557	567	358
10	290	110	80	60	45	40	40	60	700	515	533	338
11	270	110	80	60	45	40	40	64	650	479	518	322
12	250	110	80	60	45	40	40	66	650	442	557	308
13	240	110	80	60	45	40	40	70	700	415	679	294
14	230	110	75	60	45	40	40	75	820	405	658	278
15	230	100	75	55	45	40	40	80	1250	392	640	268
16	220	100	75	55	45	40	40	90	1290	380	630	262
17	210	100	70	55	45	40	40	100	1360	352	658	256
18	200	100	70	55	45	40	42	110	1440	368	640	278
19	200	100	70	55	45	40	42	120	1750	375	640	352
20	190	100	65	55	45	40	42	140	1080	310	620	479
21	180	100	65	55	45	40	42	160	896	296	634	450
22	180	100	65	55	45	40	42	200	788	292	584	418
23	170	100	65	55	45	40	44	200	868	318	567	420
24	170	95	65	55	45	40	44	180	966	342	576	995
25	160	95	65	55	45	40	44	160	1280	335	768	682
26	159	95	65	55	40	40	44	140	920	325	1280	542
27	150	95	60	55	40	40	44	140	796	316	1090	485
28	150	95	60	50	40	40	46	150	700	302	1040	468
29	140	95	60	50	---	40	46	170	651	298	886	450
30	140	95	60	50	---	40	46	200	606	298	772	425
31	140	---	60	50	---	40	---	300	---	286	690	---
TOTAL	7868	3225	2300	1755	1270	1240	1248	3439	30469	13859	20357	12987
MEAN	253	108	74.2	56.6	45.4	40.0	41.6	111	1016	447	657	433
MAX	536	130	90	60	50	40	46	300	2000	824	1280	995
MIN	140	95	60	50	40	40	40	46	500	286	274	256
CFSM	2.95	1.26	.87	.66	.53	.47	.49	1.30	11.9	5.22	7.67	5.05
IN.	3.41	1.40	1.00	.76	.55	.54	.54	1.49	13.23	6.02	8.84	5.64
AC-FT	15570	6400	4560	3480	2520	2460	2480	6820	60440	27490	40380	25760

CAL YR 1978 TOTAL 64784 MEAN 177 MAX 1860 MIN 26 CFSM 2.07 IN 28.12 AC-FT 128500
WTR YR 1979 TOTAL 99997 MEAN 274 MAX 2000 MIN 40 CFSM 3.20 IN 43.41 AC-FT 198300

15668200 CRATER CREEK NEAR NOME

LOCATION.--Lat 64°55'48", long 164°52'12", in NW¼NW¼ sec.36, T.6 S., R.31 W., Hydrologic Unit 19020002, on right bank 15 ft (5 m) upstream from culvert at mile 43 (69 km) on Nome-Kougarok Highway, 1.1 mi (1.8 km) upstream from mouth, and 34 mi (55 km) northeast of Nome.

DRAINAGE AREA.--21.9 mi² (56.7 km²).

PERIOD OF RECORD.--Annual maximum, water years 1964-65, 1967-75. August 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 480 ft (150 m), from topographic map. Sept. 18, 1964 to Aug. 29, 1975, crest-stage gage at same site and datum.

REMARKS.--Records fair except those for period of no gage-height record, Oct. 3 to June 14, which are poor. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,540 ft³/s (71.9 m³/s) July 10, 1975, gage height, 19.71 ft (6.008 m) from floodmarks, road and culvert washed out, from slope-area measurement of peak flow; no flow Apr. 11-25, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,240 ft³/s (35.1 m³/s) July 3, gage height, 13.97 ft (4.258 m); minimum daily, 2.0 ft³/s (0.057 m³/s) Feb. 23 to Apr. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	19	10	4.5	2.5	2.0	2.0	2.5	80	358	172	137
2	90	19	10	4.5	2.5	2.0	2.0	2.5	120	470	227	118
3	80	18	10	4.5	2.5	2.0	2.0	2.5	200	931	249	106
4	70	17	10	4.5	2.5	2.0	2.0	2.5	300	483	605	96
5	65	17	10	4.0	2.5	2.0	2.0	2.5	400	411	310	86
6	60	16	9.5	4.0	2.5	2.0	2.0	3.0	400	362	263	80
7	56	16	9.5	4.0	2.5	2.0	2.0	3.0	350	342	203	81
8	52	15	9.5	4.0	2.5	2.0	2.0	3.0	300	281	238	83
9	50	15	9.5	4.0	2.5	2.0	2.0	3.0	280	239	224	80
10	48	14	9.5	3.5	2.5	2.0	2.0	3.0	270	249	167	74
11	46	14	9.0	3.5	2.5	2.0	2.0	3.5	270	210	156	69
12	43	13	9.0	3.5	2.5	2.0	2.0	3.5	290	190	280	66
13	41	13	9.0	3.5	2.5	2.0	2.0	4.0	300	224	313	65
14	38	13	8.5	3.5	2.5	2.0	2.0	4.5	330	268	353	61
15	36	12	8.5	3.5	2.5	2.0	2.0	5.0	390	246	284	56
16	34	12	8.0	3.5	2.5	2.0	2.0	6.0	413	221	217	50
17	32	12	8.0	3.5	2.5	2.0	2.0	8.0	541	210	206	41
18	30	12	7.5	3.5	2.5	2.0	2.0	10	672	203	164	45
19	29	11	7.5	3.5	2.5	2.0	2.0	15	738	214	388	65
20	28	11	7.0	3.5	2.5	2.0	2.0	20	372	253	347	94
21	27	11	7.0	3.0	2.5	2.0	2.0	30	311	278	207	74
22	27	11	6.5	3.0	2.5	2.0	2.0	50	300	190	199	66
23	26	11	6.5	3.0	2.0	2.0	2.0	70	383	342	174	87
24	25	11	6.0	3.0	2.0	2.0	2.0	60	519	346	198	70
25	25	10	6.0	3.0	2.0	2.0	2.0	50	523	286	424	72
26	24	10	5.5	3.0	2.0	2.0	2.5	40	468	262	650	96
27	23	10	5.5	3.0	2.0	2.0	2.5	40	394	237	334	110
28	22	10	5.5	3.0	2.0	2.0	2.5	45	307	234	254	94
29	21	10	5.0	3.0	---	2.0	2.5	50	287	228	266	87
30	21	10	5.0	3.0	---	2.0	2.5	60	301	209	183	80
31	20	---	5.0	3.0	---	2.0	---	70	---	188	148	---
TOTAL	1289	393	243.0	109.5	67.0	62.0	62.5	672.0	10809	9165	8403	2389
MEAN	41.6	13.1	7.84	3.53	2.39	2.00	2.08	21.7	360	296	271	79.6
MAX	100	19	10	4.5	2.5	2.0	2.5	70	738	931	650	137
MIN	20	10	5.0	3.0	2.0	2.0	2.0	2.5	80	188	148	41
CFSM	1.90	.60	.36	.16	.11	.09	.10	.99	16.4	13.5	12.4	3.64
IN.	2.19	.67	.41	.19	.11	.11	.11	1.14	18.36	15.57	14.27	4.06
AC-FT	2560	780	482	217	133	123	124	1330	21440	18180	16670	4740

CAL YR 1978 TOTAL 19998.50 MEAN 54.8 MAX 681 MIN .00 CFSM 2.50 IN 33.97 AC-FT 39670
WTR YR 1979 TOTAL 33664.00 MEAN 92.2 MAX 931 MIN 2.0 CFSM 4.21 IN 57.18 AC-FT 66770

15744500 KOBUK RIVER NEAR KIANA
(National stream-quality accounting network station)

LOCATION.--Lat 66°58'25", long 160°07'51", in NW¼SE¼ sec.11, T.18 N., R.7 W., Hydrologic Unit 19020001, on left bank 5.8 mi (9.3 km) upstream from Portage Creek, 9.7 mi (15.6 km) upstream from Squirrel River, and 9.8 mi (15.8 km) upstream from Kiana.

DRAINAGE AREA.--9,520 mi^2 (24,660 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 35 ft (10.7 m), from topographic map.

REMARKS.--Records fair except those for Oct. 4 to May 31, which are estimated and poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 93,800 ft^3/s (2,660 m^3/s) June 12, 1979, gage height, 55.75 ft (16.993 m), from rating curve extended above 60,000 ft^3/s (1,700 m^3/s), minimum daily, 1,600 ft^3/s (45 m^3/s) Apr. 1-22, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 93,800 ft^3/s (2,660 m^3/s) June 12, gage height, 55.75 ft (16.993 m) from rating curve extended above 60,000 ft^3/s (1,700 m^3/s), minimum daily, 1,900 ft^3/s (54 m^3/s) Mar. 16 to Apr. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32000	6400	4300	3600	3000	2100	1900	3300	56700	45500	21700	56600
2	27200	6300	4300	3600	3000	2100	1900	4000	61000	42300	20800	51700
3	24900	6200	4300	3600	3000	2100	1900	4500	72000	40400	19900	47400
4	22000	6100	4200	3600	3000	2100	1900	5500	77200	43200	19600	43100
5	20000	6000	4200	3600	3000	2100	1900	8000	79400	45100	20000	38800
6	18000	5900	4200	3500	2800	2000	1900	12000	79100	42300	21100	35200
7	16000	5800	4200	3500	2800	2000	1900	20000	77600	41300	23600	32500
8	15000	5700	4200	3500	2800	2000	1900	30000	76700	39700	28600	30600
9	14000	5600	4200	3500	2800	2000	1900	40000	74700	36900	35300	28500
10	13000	5500	4100	3500	2800	2000	1900	60000	72700	34900	41400	26900
11	12000	5500	4100	3400	2600	2000	1900	74000	81200	36200	44400	25500
12	12000	5400	4100	3400	2600	2000	1900	66000	92700	38400	44900	24300
13	11000	5400	4100	3400	2600	2000	1900	60000	84900	35600	43600	22600
14	11000	5300	4100	3400	2600	2000	1900	56000	76300	33800	38900	21700
15	10000	5200	4100	3400	2600	2000	1900	52000	70900	32400	34800	21000
16	9800	5200	4000	3400	2400	1900	1900	52000	64000	30600	32900	20000
17	9600	5100	4000	3400	2400	1900	1900	56000	60400	28500	31000	19100
18	9000	5100	4000	3400	2400	1900	1900	58000	57700	26900	30000	18000
19	8600	5000	4000	3400	2400	1900	1900	60000	55000	25600	30100	18000
20	8200	5000	4000	3400	2400	1900	1900	64000	56000	24300	38200	17000
21	8000	4900	3800	3200	2300	1900	1900	66000	53200	23300	53400	17000
22	7800	4800	3800	3200	2300	1900	1900	68000	48700	22300	56000	17000
23	7600	4700	3800	3200	2300	1900	1900	70000	45500	21600	53500	18000
24	7500	4700	3800	3200	2300	1900	2000	70000	44000	21300	51300	19000
25	7400	4600	3800	3200	2300	1900	2100	70000	47500	23000	49000	20000
26	7200	4500	3700	3200	2200	1900	2200	68000	59100	27300	48700	21000
27	7000	4400	3700	3200	2200	1900	2300	66000	61500	27400	61300	22000
28	6900	4400	3700	3200	2200	1900	2400	64000	58900	27000	65600	21000
29	6800	4300	3700	3200	---	1900	2700	60000	55500	25800	63600	19000
30	6700	4300	3700	3200	---	1900	2900	58000	50100	24200	62700	17000
31	6600	---	3700	3200	---	1900	---	56000	---	22900	60800	---
TOTAL	382800	157300	123900	104700	72100	60900	60300	1501300	1950200	990000	1246700	789500
MEAN	12350	5243	3997	3377	2575	1965	2010	48430	65010	31940	40220	26320
MAX	32000	6400	4300	3600	3000	2100	2900	74000	92700	45500	65600	56600
MIN	6600	4300	3700	3200	2200	1900	1900	3300	44000	21300	19600	17000
CFSM	1.30	.55	.42	.36	.27	.21	.21	5.09	6.83	3.36	4.23	2.77
IN.	1.50	.61	.48	.41	.28	.24	.24	5.87	7.62	3.87	4.87	3.09
AC-FT	759300	312000	245800	207700	143000	120800	119600	2978000	3868000	1964000	2473000	1566000

CAL YR 1978 TOTAL 4602700 MEAN 12610 MAX 52000 MIN 1600 CFSM 1.33 IN 17.99 AC-FT 9129000
WTR YR 1979 TOTAL 7439700 MEAN 20380 MAX 92700 MIN 1900 CFSM 2.14 IN 29.07 AC-FT 14760000

NOTE.--No gage-height record Oct. 11 to May 31.

15744500 KOBUK RIVER NEAR KIANA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1976 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE.--June to September 1978 and May to September 1979.

INSTRUMENTATION.--Water-temperature recorder since June 10, 1978.

REMARKS.--No temperature record prior to May 31.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURES.--Maximum, 19.0°C, July 14, 15, 1978; minimum, 0.0°C during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES.--Maximum, 16.5°C, July 21; minimum, 0.0°C during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
DEC 07...	1400	4140	177	7.2	.0	.70	8.7	--	--	96	17	30
APR 18...	1500	1870	200	--	.0	.50	6.8	--	--	100	18	32
19...	1030	--	--	7.3	--	--	--	--	--	--	--	--
JUN 01...	1300	58600	85	6.2	8.5	4.5	11.6	4	0	41	12	13
JUL 31...	1700	21500	135	7.8	15.0	1.4	10.2	2	1	69	12	22
AUG 21...	2000	52800	123	7.2	11.0	12	10.4	35	12	64	12	20
SEP 18...	1130	--	169	7.1	1.5	.70	13.8	--	--	79	12	25

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
DEC 07...	5.0	2.0	1.3	96	13	1.6	.0	5.3	111	106	.27	--
APR 18...	5.2	.9	.3	--	15	1.0	.1	5.3	108	110	.29	--
19...	--	--	--	116	--	--	--	--	--	--	--	--
JUN 01...	2.1	.8	.2	36	7.9	.4	.1	2.3	51	45	.16	--
JUL 31...	3.5	.7	.5	70	13	.4	.1	3.0	79	78	.13	--
AUG 21...	3.5	.7	.2	64	18	.6	.1	2.7	75	77	.10	--
SEP 18...	4.1	1.1	.4	82	27	.1	.1	3.5	95	103	.15	.14

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)
DEC 07...	.04	.32	.36	.00	.83	.63	--	.01	.02	1	--	1
APR 18...	.01	.25	.26	.13	.13	.55	--	.00	.00	1	--	1
19...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 01...	.03	.27	.30	.18	.12	.46	--	.01	.02	1	--	1
JUL 31...	.00	.23	.23	.05	.18	.36	--	.07	.03	--	--	--
AUG 21...	.02	.08	.10	.00	.22	.20	--	.04	.01	--	--	--
SEP 18...	.00	.27	.27	.07	.20	.42	.34	.01	.00	1	0	1

15744500 KOBUK RIVER NEAR KIANA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, SUS- PENDED RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM SUS- PENDED RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, SUS- PENDED RECOV. (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, SUS- PENDED RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)
DEC 07...	100	0	100	2	1	<1	0	0	0	2	0	<3
APR 18...	0	0	0	1	0	2	10	10	0	0	0	0
19...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 01...	0	0	0	1	0	1	0	0	0	0	0	0
JUL 31...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 21...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 18...	0	0	20	1	0	5	10	0	10	0	0	<3

DATE	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, SUS- PENDED RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, SUS- PENDED RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDED RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
DEC 07...	14	13	1	330	230	100	16	12	4	30	0	30
APR 18...	5	5	0	250	190	60	9	0	9	20	0	20
19...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 01...	13	7	6	1600	1400	160	18	14	4	60	50	10
JUL 31...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 21...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 18...	0	0	2	460	--	160	7	0	11	30	20	10

DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY SUS- PENDED RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, SUS- PENDED TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, SUS- PENDED RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDED RECOV- ERABLE (UG/L AS ZN)
DEC 07...	.0	.0	.0	0	0	0	1	1	0	40	20
APR 18...	.0	.0	.0	1	1	0	0	0	0	30	20
19...	--	--	--	--	--	--	--	--	--	--	--
JUN 01...	.1	.1	.0	0	0	0	0	0	0	20	10
JUL 31...	--	--	--	--	--	--	--	--	--	--	--
AUG 21...	--	--	--	--	--	--	--	--	--	--	--
SEP 18...	.1	.1	.0	0	0	0	0	0	0	0	0

DATE	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	BIOMASS CHLORO- PHYLL RATIO PERI- PHYTON (UNITS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC 07...	20	7.3	.7	--	--	--	--	--	3	34	--
APR 18...	10	.0	.8	--	--	--	--	--	1	5.0	--
19...	--	--	--	--	--	--	--	--	--	--	--
JUN 01...	10	15	.3	--	--	--	--	--	41	6490	47
JUL 31...	--	--	--	5.43	5.98	1.31	.000	420	12	697	72
AUG 21...	--	--	--	--	--	--	--	--	104	14900	67
SEP 18...	<3	8.4	.6	--	--	--	--	--	--	--	--

15744500 KOBUK RIVER NEAR KIANA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO SEPTEMBER 1979

DATE	DEC 7,78	APR 18,79	JUN 1,79	JUL 31,79	SEP 18,79
TIME	1400	1500	1300	1700	1135
TOTAL CELLS/ML	14	0	340	260	57
DIVERSITY: DIVISION	0.0	0.0	0.2	0.3	0.0
.CLASS	0.0	0.0	0.2	0.3	0.0
..ORDER	0.0	0.0	0.2	0.6	0.0
...FAMILY	0.0	0.0	0.2	2.3	1.5
....GENUS	0.0	0.0	0.2	2.5	1.5

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	--	-	--	-	14	5	--	-
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....MELOSIRA	--	-	--	-	--	-	14	5	--	-
..PENNALES										
...CYMBELLACEAE										
....CYMBELLA	--	-	--	-	--	-	14	5	--	-
...DIATOMACEAE										
....DIATOMA	--	-	--	-	--	-	27	11	14#	25
...EUNOTIACEAE										
....EUNOTIA	--	-	--	-	--	-	--	-	14#	25
...FRAGILARIACEAE										
....HANNAEA	--	-	--	-	--	-	14	5	--	-
....SYNEDRA	--	-	--	-	--	-	55#	21	--	-
...NAVICULACEAE										
....NAVICULA	--	-	--	-	13	4	14	5	--	-
...NITZSCHIACEAE										
....NITZSCHIA	--	-	--	-	--	-	110#	42	--	-
...TABELLARIACEAE										
....TABELLARIA	--	-	--	-	--	-	--	-	29#	50
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..HORMOGONALES										
...OSCILLATORIACEAE										
....OSCILLATORIA	--	-	--	-	320#	96	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....TRACHELOMONAS	14#	100	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

15744500 KOBUK RIVER NEAR KIANA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR MAY TO SEPTEMBER 1979

MAY		
MAX	MIN	MEAN
6.5	6.5	6.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.5	1.0	6.0	14.0	12.0	13.0	15.0	14.0	14.5	9.5	8.0	8.5
2	8.5	5.0	7.0	13.5	12.5	13.0	14.5	13.5	14.0	9.0	7.5	8.5
3	8.5	6.0	7.5	13.0	12.5	12.5	15.0	13.5	14.0	8.5	7.5	8.0
4	9.0	7.5	8.5	13.0	12.0	12.0	14.5	13.5	14.0	8.0	6.5	7.5
5	10.0	8.5	9.0	12.0	11.0	11.5	15.0	13.5	14.0	8.0	6.0	7.0
6	10.0	9.0	9.5	12.0	11.0	11.5	14.5	13.0	14.0	7.5	6.5	7.0
7	10.0	9.0	9.5	11.5	10.0	10.5	14.0	13.0	13.5	7.5	7.0	7.5
8	10.5	9.0	9.5	12.0	10.0	10.5	13.5	13.0	13.0	8.5	7.0	8.0
9	10.0	9.5	10.0	11.0	10.0	10.5	14.0	12.5	13.0	8.5	7.0	8.0
10	9.5	7.5	9.0	10.5	10.0	10.5	13.5	12.5	13.0	8.5	7.0	8.0
11	7.5	6.0	6.5	11.5	9.5	10.5	13.0	12.5	12.5	9.0	7.5	8.0
12	6.5	6.0	6.0	13.0	9.5	11.0	14.0	12.0	13.0	8.5	7.0	8.0
13	6.5	6.0	6.0	13.5	11.0	12.0	13.5	12.5	13.0	7.0	5.0	6.0
14	7.0	6.0	6.5	15.0	12.5	13.5	13.5	12.5	13.0	5.0	4.0	4.5
15	8.0	7.0	7.5	15.5	13.5	14.5	13.5	12.0	13.0	4.5	3.5	4.0
16	8.5	7.5	8.0	15.5	13.5	14.5	13.0	12.0	12.5	4.0	2.5	3.5
17	9.0	8.0	8.5	15.0	13.5	14.0	13.5	12.0	13.0	4.0	2.5	3.0
18	9.0	8.5	8.5	15.0	13.5	14.0	13.0	12.5	13.0	2.5	1.5	1.5
19	9.0	8.0	8.5	15.0	13.5	14.0	12.5	12.0	12.5	---	---	---
20	10.5	8.0	9.0	16.0	13.0	14.5	12.0	10.5	11.5	---	---	---
21	10.0	8.5	9.0	16.5	14.5	15.5	10.5	10.0	10.0	---	---	---
22	11.5	9.0	10.0	16.0	15.0	15.5	11.5	10.0	10.5	---	---	---
23	12.5	10.0	11.0	16.0	14.5	15.0	12.0	10.0	11.0	---	---	---
24	12.0	11.0	11.5	15.0	14.5	14.5	12.5	10.5	11.5	---	---	---
25	11.5	10.0	10.5	14.5	13.5	14.0	12.5	11.0	11.5	---	---	---
26	10.5	9.0	9.5	14.5	13.0	14.0	11.5	10.5	11.0	---	---	---
27	10.0	9.0	9.5	15.0	13.5	14.0	10.5	10.0	10.5	---	---	---
28	11.0	9.0	10.0	14.5	13.5	14.5	10.0	9.5	10.0	---	---	---
29	12.5	10.0	11.0	15.0	14.0	14.5	10.0	9.0	9.5	---	---	---
30	14.0	11.0	12.5	15.5	14.5	15.0	9.5	9.0	9.5	---	---	---
31	---	---	---	15.5	14.0	14.5	9.0	8.5	9.0	---	---	---
MONTH	14.0	1.0	9.0	16.5	9.5	13.0	15.0	8.5	12.0	9.5		
YEAR	16.5											

15798700 NUNAVAK CREEK NEAR BARROW

LOCATION.--Lat 71°15'35", long 156°46'57", in SE¼ sec.18, T.22 N., R.18 W., North Slope Borough, Hydrologic Unit 19010003, 0.7 mi (1.1 km) downstream from Emaiksoun Lake, 1.2 mi (1.9 km) upstream from Nunavak Bay, and 2.3 mi (3.7 km) south of Barrow Post Office.

DRAINAGE AREA.--2.79 mi² (7.23 km²), approximately.

PERIOD OF RECORD.--October 1971 to current year.

REVISED RECORDS.--WDR AK-76-1:1972

GAGE.--Water-stage recorder. Altitude of gage is 19 ft (5.8 m), from topographic map.

REMARKS.--Records poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.-8 years, 0.74 ft³/s (0.021 m³/s), 3.60 in/yr (91 mm/yr), 536 acre-ft/yr (661,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 66 ft³/s (1.87 m³/s) June 23, 1974, gage height, 2.92 ft (0.890 m), flow over snow; maximum gage height, 4.27 ft (1.301 m) June 19, 1974, backwater from snow and ice; no flow during all winter months and at times during summer months.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 16 ft³/s (0.45 m³/s) June 10, flow over snow; maximum gage height, 2.84 ft (0.866 m) about June 10, backwater from snow and ice; no flow prior to June 2 and Aug. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.16	.20	5.3
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.20	5.0
3	.00	.00	.00	.00	.00	.00	.00	.00	.20	.22	.44	5.0
4	.00	.00	.00	.00	.00	.00	.00	.00	.60	.88	.36	4.5
5	.00	.00	.00	.00	.00	.00	.00	.00	1.0	1.8	.16	4.5
6	.00	.00	.00	.00	.00	.00	.00	.00	2.0	2.0	.08	5.0
7	.00	.00	.00	.00	.00	.00	.00	.00	4.0	1.8	.10	3.4
8	.00	.00	.00	.00	.00	.00	.00	.00	8.0	1.6	.07	2.7
9	.00	.00	.00	.00	.00	.00	.00	.00	12	1.5	.03	2.7
10	.00	.00	.00	.00	.00	.00	.00	.00	16	2.0	.01	2.7
11	.00	.00	.00	.00	.00	.00	.00	.00	13	3.0	.00	2.7
12	.00	.00	.00	.00	.00	.00	.00	.00	11	6.0	.02	2.7
13	.00	.00	.00	.00	.00	.00	.00	.00	9.2	4.0	.03	2.4
14	.00	.00	.00	.00	.00	.00	.00	.00	6.4	3.0	.03	2.7
15	.00	.00	.00	.00	.00	.00	.00	.00	4.5	2.0	.05	2.7
16	.00	.00	.00	.00	.00	.00	.00	.00	2.9	1.5	.05	3.2
17	.00	.00	.00	.00	.00	.00	.00	.00	1.3	1.2	.04	3.7
18	.00	.00	.00	.00	.00	.00	.00	.00	.80	1.0	.24	3.7
19	.00	.00	.00	.00	.00	.00	.00	.00	.63	.80	.42	3.7
20	.00	.00	.00	.00	.00	.00	.00	.00	.57	.69	.48	3.7
21	.00	.00	.00	.00	.00	.00	.00	.00	.48	.63	.66	4.0
22	.00	.00	.00	.00	.00	.00	.00	.00	.46	.50	1.3	4.0
23	.00	.00	.00	.00	.00	.00	.00	.00	.42	.36	2.7	4.2
24	.00	.00	.00	.00	.00	.00	.00	.00	.36	.30	4.0	3.7
25	.00	.00	.00	.00	.00	.00	.00	.00	.27	.22	4.5	3.4
26	.00	.00	.00	.00	.00	.00	.00	.00	.22	.18	5.0	2.9
27	.00	.00	.00	.00	.00	.00	.00	.00	.22	.14	5.6	2.9
28	.00	.00	.00	.00	.00	.00	.00	.00	.20	.18	5.6	3.2
29	.00	.00	.00	.00	---	.00	.00	.00	.16	.14	5.8	2.9
30	.00	.00	.00	.00	---	.00	.00	.00	.12	.12	5.8	2.9
31	.00	---	.00	.00	---	.00	---	.00	---	.14	5.6	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	.00	97.01	38.24	49.57	106.1
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	3.23	1.23	1.60	3.54
MAX	.00	.00	.00	.00	.00	.00	.00	.00	16	6.0	5.8	5.3
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.12	.00	2.4
CFSM	.000	.000	.000	.000	.000	.000	.000	.000	1.16	.44	.57	1.27
IN.	.00	.00	.00	.00	.00	.00	.00	.00	1.29	.51	.66	1.41
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	192	76	98	210

CAL YR 1978 TOTAL 204.35 MEAN .56 MAX 16 MIN .00 CFSM .20 IN 2.72 AC-FT 405
WTR YR 1979 TOTAL 290.92 MEAN .80 MAX 16 MIN .00 CFSM .29 IN 3.88 AC-FT 577

NOTE.--No gage-height record Oct. 1 to June 10.

15896000 KUPARUK RIVER NEAR DEADHORSE
(National stream-quality accounting network station)

LOCATION.--Lat 70°16'54", long 148°57'35", in NE¼ sec.25, T.11 N., R.12 E., North Slope Borough, Hydrologic Unit 19010001, near right bank, 1.8 mi (2.9 km) northeast of SE Eileen State No. 1, 2.1 mi (3.4 km) south of Arctic Slope/Alaska General Camp, 10 mi (16 km) upstream from mouth on Gwyder Bay, and 13 mi (21 km) northwest of Deadhorse.

DRAINAGE AREA.--3,130 mi^2 (8,107 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is at National Geodetic Vertical Datum of 1929 (levels by private engineering firm).

REMARKS.--Water-discharge records estimated and poor for period of no gage-height record, prior to May 31, fair thereafter. Winter low flow may be discontinuous as the flow probably varies significantly along the main stem of the river due to the formation of aufeis in the vicinity of springs. Flow may cease at other points.

AVERAGE DISCHARGE.--8 years, 1,256 ft^3/s (35.57 m^3/s), 5.45 in/yr (138 mm/yr), 910,000 acre-ft/yr (1.12 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 118,000 ft^3/s (3,340 m^3/s) June 7, 1978, gage height, 37.6 ft (11.46 m), from rangeline on recorder chart; no flow at times during winter periods.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24,300 ft^3/s (688 m^3/s) June 1, gage height, 32.27 ft (9.836 m); maximum gage height, 33.38 ft (10.174 m) May 30, backwater from ice; no flow Nov. 11 to May 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180	7.0	.00	.00	.00	.00	.00	.00	22600	2720	3140	4020
2	160	6.0	.00	.00	.00	.00	.00	.00	16100	2020	2510	3720
3	150	5.0	.00	.00	.00	.00	.00	.00	9250	1380	2120	3220
4	130	4.0	.00	.00	.00	.00	.00	.00	4820	1060	2570	2880
5	120	3.0	.00	.00	.00	.00	.00	.00	3500	876	3980	2620
6	110	3.0	.00	.00	.00	.00	.00	.00	2870	768	6250	2470
7	100	2.0	.00	.00	.00	.00	.00	.00	2300	690	5680	2510
8	90	2.0	.00	.00	.00	.00	.00	.00	1900	780	5440	2680
9	80	1.0	.00	.00	.00	.00	.00	.00	1440	2250	5200	2510
10	70	1.0	.00	.00	.00	.00	.00	100	1240	2100	4080	2250
11	64	.00	.00	.00	.00	.00	.00	500	1160	1520	3360	1950
12	58	.00	.00	.00	.00	.00	.00	1000	988	1200	2820	1650
13	52	.00	.00	.00	.00	.00	.00	1500	888	1040	2390	1380
14	46	.00	.00	.00	.00	.00	.00	2000	924	900	2110	1020
15	40	.00	.00	.00	.00	.00	.00	3000	1540	780	1950	1100
16	36	.00	.00	.00	.00	.00	.00	2800	2150	680	1990	1310
17	32	.00	.00	.00	.00	.00	.00	2600	2020	602	2050	970
18	30	.00	.00	.00	.00	.00	.00	2500	1460	514	2490	770
19	28	.00	.00	.00	.00	.00	.00	2400	1240	443	2510	870
20	25	.00	.00	.00	.00	.00	.00	2300	1040	401	2410	668
21	22	.00	.00	.00	.00	.00	.00	2200	948	380	2190	596
22	20	.00	.00	.00	.00	.00	.00	2100	1190	362	1910	556
23	18	.00	.00	.00	.00	.00	.00	2000	1820	344	1790	540
24	16	.00	.00	.00	.00	.00	.00	2000	1740	315	2110	588
25	14	.00	.00	.00	.00	.00	.00	2000	1680	310	2980	636
26	13	.00	.00	.00	.00	.00	.00	2300	1720	300	3570	710
27	12	.00	.00	.00	.00	.00	.00	3000	2960	295	3420	720
28	11	.00	.00	.00	.00	.00	.00	5000	5260	290	3330	676
29	10	.00	.00	.00	---	.00	.00	10000	4620	290	3510	660
30	9.0	.00	.00	.00	---	.00	.00	15000	3500	1930	3540	580
31	8.0	---	.00	.00	---	.00	---	20000	---	3290	3780	---
TOTAL	1754.0	34.00	.00	.00	.00	.00	.00	86300.00	104868	30830	97180	46830
MEAN	56.6	1.13	.000	.000	.000	.000	.000	2784	3496	995	3135	1561
MAX	180	7.0	.00	.00	.00	.00	.00	20000	22600	3290	6250	4020
MIN	8.0	.00	.00	.00	.00	.00	.00	.00	888	290	1790	540
CFSM	.02	.000	.000	.000	.000	.000	.000	.89	1.12	.32	1.00	.50
IN.	.02	.00	.00	.00	.00	.00	.00	1.03	1.25	.37	1.15	.56
AC-FT	3480	67	.00	.00	.00	.00	.00	171200	208000	61150	192800	92890

CAL YR 1978 TOTAL 487409.00 MEAN 1335 MAX 100000 MIN .00 CFSM .43 IN 5.79 AC-FT 966800
WTR YR 1979 TOTAL 367796.00 MEAN 1008 MAX 22600 MIN .00 CFSM .32 IN 4.37 AC-FT 729500

15896000 KUPARUK RIVER NEAR DEADHORSE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-72, 1974 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June to September 1971, June to September 1972, July to September 1976, July to September 1978, June to September 1979.

INSTRUMENTATION.--Temperature recorder operated occasionally since June 23, 1971.

REMARKS.--Temperature recorder started June 6. The river is frozen from October through May.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum recorded, 18.0°C, July 3, 1979; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 18.0°C July 3; minimum, 0.0°C during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
JUL					
13...	1511	117	1.0	80	14.5
13...	1512	167	1.0	80	14.5
13...	1513	217	1.0	80	14.5
AUG					
16...	1841	125	1.0	95	14.5
16...	1842	155	1.0	95	14.5
16...	1843	185	1.0	95	14.5

DATE	TIME	STREAM WIDTH (FT)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
OCT 26...	1330	--	13	210	--	.0	.60	13.1	K0	K1	100	4
MAY 26...	1500	--	2310	40	7.0	.0	1.8	13.4	84	14	23	6
JUN 05...	1900	--	3350	90	6.8	4.0	1.5	12.2	2	1	44	12
JUL 13...	1500	277	1030	80	7.5	14.5	.50	10.0	0	0	41	0
AUG 16...	1830	295	1990	95	7.2	14.5	.40	9.2	5	1	47	4
SEP 10...	1700	--	2280	120	7.3	5.5	1.2	7.3	4	1	62	2

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 26...	36	3.3	3.1	.4	--	5.7	2.3	.0	1.9	118	113	.15
MAY 26...	7.5	1.0	1.5	.8	21	3.3	1.3	.1	1.3	41	27	.08
JUN 05...	16	1.1	2.2	.6	40	6.3	3.7	.1	1.3	66	51	.06
JUL 13...	15	.8	2.3	.6	52	4.7	.9	.1	1.8	51	52	.03
AUG 16...	16	1.8	1.9	.3	53	8.2	.5	.1	2.1	66	57	.04
SEP 10...	21	2.3	1.8	.3	73	1.3	1.5	.1	2.6	82	70	.15

K NON-IDEAL COLONY COUNT

15896000 KUPARUK RIVER NEAR DEADHORSE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)
OCT 26...	--	.01	.28	.29	.00	.30	.44	--	.00	.00	0	1
MAY 26...	--	.08	.28	.36	.09	.27	.44	--	.01	.02	--	--
JUN 05...	--	.01	.59	.60	.01	.59	.66	--	.02	.04	1	0
JUL 13...	--	.08	.33	.41	.26	.15	.44	--	.02	.02	--	--
AUG 16...	--	.01	.28	.29	.00	.32	.33	--	.26	.00	0	0
SEP 10...	.00	.02	.55	.57	.03	.54	.72	.54	.01	.00	--	--

DATE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)
OCT 26...	100	30	70	3	0	3	0	0	0	0	0	1
MAY 26...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 05...	0	0	0	1	0	1	0	0	0	0	0	0
JUL 13...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 16...	0	0	40	0	0	13	0	0	10	0	0	<3
SEP 10...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)
OCT 26...	11	0	13	40	30	<10	70	64	6	0	0
MAY 26...	--	--	--	--	--	--	--	--	--	--	--
JUN 05...	16	13	3	280	210	70	23	19	4	20	10
JUL 13...	--	--	--	--	--	--	--	--	--	--	--
AUG 16...	2	0	7	280	250	30	5	0	26	70	70
SEP 10...	--	--	--	--	--	--	--	--	--	--	--

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT 26...	4	.0	.0	.0	0	0	0	0	0	0	10
MAY 26...	--	--	--	--	--	--	--	--	--	--	--
JUN 05...	10	.1	.0	.1	0	0	0	0	0	0	40
JUL 13...	--	--	--	--	--	--	--	--	--	--	--
AUG 16...	2	.0	.0	.0	0	0	0	0	0	0	20
SEP 10...	--	--	--	--	--	--	--	--	--	--	--

15896000 KUPARUK RIVER NEAR DEADHORSE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	BIOMASS CHLORO-PHYLL RATIO PERI-PHYTON (UNITS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 26...	0	10	4.5	.2	--	--	--	--	--	4	.14
MAY 26...	--	--	--	--	--	--	--	--	--	5	31
JUN 05...	20	20	12	.3	--	--	--	--	--	7	63
JUL 13...	--	--	--	--	--	--	--	--	--	4	11
AUG 16...	0	20	11	.5	--	--	--	--	--	2	11
SEP 10...	--	--	--	--	.240	.240	.120	.000	.09	2	12

15896000 KUPARUK RIVER NEAR DEADHORSE--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO SEPTEMBER 1979

DATE	OCT 26,78	MAY 26,79	JUN 5,79	JUL 13,79	AUG 16,79	SEP 10,79
TIME	1330	1500	1900	1500	1830	1700
TOTAL CELLS/ML	50	64	51	450	150	400
DIVERSITY: DIVISION	1.2	0.0	0.0	0.9	0.2	1.2
.CLASS	1.2	0.0	0.0	0.9	0.2	1.2
..ORDER	1.4	0.0	0.0	0.9	0.3	1.8
...FAMILY	1.4	0.7	0.8	2.3	2.5	2.4
....GENUS	1.4	0.7	0.8	2.3	2.8	2.4

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...CHLOROCOCCACEAE												
....CHLOROCOCCUM	--	-	--	-	--	-	--	-	--	-	50	13
...MICRACTINIACEAE												
....GOLENKINIA	5	10	--	-	--	-	--	-	--	-	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	--	-	--	-	--	-	--	-	1	1	5	1
...SCENEDESMACEAE												
....TETRASTRUM	--	-	--	-	--	-	--	-	--	-	20	5
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	5	10	--	-	--	-	--	-	--	-	--	-
..ZYGNEMATALES												
...DESMIDIACEAE												
....COSMARIUM	--	-	--	-	--	-	--	-	1	1	--	-
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	35#	70	--	-	--	-	--	-	1	1	--	-
..PENNALES												
...ACHNANTHACEAE												
....ACHNANTHES	--	-	13#	20	--	-	150#	33	38#	25	10	3
...CYMBELLACEAE												
....AMPHORA	--	-	--	-	--	-	--	-	9	6	10	3
....CYMBELLA	--	-	--	-	13#	25	27	6	3	2	--	-
...DIATOMACEAE												
....DIATOMA	--	-	51#	80	--	-	27	6	--	-	--	-
...FRAGILARIACEAE												
....FRAGILARIA	--	-	--	-	--	-	--	-	5	3	--	-
....HANNAEA	--	-	--	-	--	-	--	-	5	3	--	-
....SYNEDRA	--	-	--	-	39#	75	14	3	34#	23	5	1
...GOMPHONEMATACEAE												
....GOMPHONEMA	--	-	--	-	--	-	14	3	1	1	--	-
...NAVICULACEAE												
....NAVICULA	--	-	--	-	--	-	--	-	19	13	5	1
...NITZSCHIACEAE												
....NITZSCHIA	--	-	--	-	--	-	69#	15	--	-	10	3
...TABELLARIACEAE												
....TABELLARIA	--	-	--	-	--	-	--	-	30#	20	10	3
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	5	10	--	-	--	-	150#	33	--	-	91#	23
..HORMOGONALES												
...OSCILLATORIACEAE												
....SCHIZOTHRIX	--	-	--	-	--	-	--	-	--	-	180#	46
PYRRHOPHYTA (FIRE ALGAE)												
.DINOPHYCEAE												
..PERIDINIALES												
...PERIDINIACEAE												
....PERIDINIUM	--	-	--	-	--	-	--	-	1	1	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

15896000 KUPARUK RIVER NEAR DEADHORSE--Continued

TEMPERATURE, WATER (DEG. C), JUNE TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	16.0	13.5	14.5	14.5	13.0	13.5	7.5	7.0	7.5
2	---	---	---	17.0	15.5	16.0	15.0	14.5	14.5	7.5	7.0	7.0
3	---	---	---	18.0	16.5	17.0	14.5	13.5	14.0	7.0	6.0	6.5
4	---	---	---	16.5	14.5	15.5	13.5	12.0	12.5	6.5	6.0	6.0
5	---	---	---	15.0	14.0	14.5	12.0	9.0	10.0	7.0	6.5	6.5
6	4.5	2.5	3.5	15.0	13.0	14.0	9.0	8.5	8.5	7.0	6.0	6.5
7	7.5	4.0	6.0	13.5	11.5	12.5	11.0	8.5	9.5	8.0	6.5	7.0
8	9.0	7.0	8.0	11.5	10.5	11.0	13.5	11.0	12.0	8.0	7.0	7.5
9	10.0	7.0	8.5	12.5	11.0	11.5	14.5	13.0	14.0	7.0	6.5	6.5
10	10.5	9.5	10.0	13.0	11.5	12.0	14.0	12.0	13.0	6.5	5.5	6.0
11	10.5	7.5	9.0	11.5	10.5	11.0	12.5	11.5	12.0	---	---	---
12	7.5	6.0	6.5	13.5	10.5	12.0	15.0	12.5	13.5	---	---	---
13	7.0	6.0	6.5	15.5	12.5	14.0	15.0	13.5	14.0	---	---	---
14	8.5	6.0	7.0	17.0	14.5	16.0	14.5	12.5	13.5	---	---	---
15	10.0	7.5	8.5	17.0	15.5	16.5	15.0	14.0	14.5	---	---	---
16	10.5	8.0	9.0	16.5	15.0	16.0	15.0	14.0	14.5	---	---	---
17	10.0	8.5	9.5	16.0	14.5	15.0	14.0	12.5	13.0	---	---	---
18	9.0	6.5	7.5	15.0	14.0	14.5	14.0	12.5	13.0	---	---	---
19	6.5	5.5	6.0	14.5	13.0	13.5	14.0	13.0	13.5	---	---	---
20	6.5	6.0	6.5	13.0	12.0	12.5	13.5	13.0	13.5	---	---	---
21	7.5	6.5	7.0	13.5	11.5	12.5	13.5	12.0	12.5	---	---	---
22	9.5	7.5	8.5	13.5	11.5	12.5	12.0	11.5	11.5	---	---	---
23	11.5	8.5	10.0	15.0	12.0	13.5	12.0	11.5	11.5	---	---	---
24	11.5	8.5	10.5	17.5	14.0	15.5	13.5	12.0	12.5	---	---	---
25	8.5	7.0	7.5	15.5	13.5	14.5	13.5	12.5	13.0	---	---	---
26	7.5	6.5	7.0	14.0	12.5	13.5	13.5	13.0	13.0	---	---	---
27	8.0	7.0	7.5	12.5	11.5	12.0	13.5	12.0	12.5	---	---	---
28	10.0	7.5	9.0	14.5	11.5	13.0	12.0	11.5	11.5	---	---	---
29	12.0	9.0	10.5	14.0	12.0	13.0	11.5	9.0	10.0	---	---	---
30	13.5	11.0	12.5	13.0	12.0	12.5	9.0	8.5	9.0	---	---	---
31	---	---	---	13.0	12.0	12.5	8.5	7.5	8.0	---	---	---
MONTH	13.5	2.5	8.0	18.0	10.5	13.5	15.0	7.5	12.5	8.0		
YEAR	18.0											

15896700 PUTULIGAYUK RIVER NEAR DEADHORSE

LOCATION.--Lat 70°16'03", long 148°37'41", in NE¼ sec. 32, T. 11 N., R. 14 E., North Slope Borough, Hydrologic Unit 19010001, at midchannel 200 ft (61 m) upstream from culvert causeway, 0.2 mi (0.3 km) downstream from unnamed tributary, 6.2 mi (10.0 km) northwest of Deadhorse, and 7.3 mi (11.7 km) upstream from mouth on Prudhoe Bay.

DRAINAGE AREA.--176 mi^2 (456 km^2), approximately.

PERIOD OF RECORD.--May 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is at National Geodetic Vertical Datum of 1929 (levels by private engineering firm). Prior to June 4, 1972, on right bank 150 ft (46 m) downstream at same datum.

REMARKS.--Records poor. Several observations of water temperature were made this year.

AVERAGE DISCHARGE.--9 years, 39.7 ft^3/s (1.124 m^3/s), 3.06 in/yr (78 mm/yr), 28,760 acre-ft/yr (35.5 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,980 ft^3/s (141 m^3/s) June 6, 1971, gage height, 24.50 ft (7.468 m), at site then in use; no flow during winter periods each year.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,100 ft^3/s (31.2 m^3/s) May 31; maximum gage height, 18.61 ft (5.672 m), May 31, backwater from snow; no flow Oct. 10 to May 14, 24-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	.00	.00	.00	.00	.00	.00	.00	800	11	.44	72
2	2.0	.00	.00	.00	.00	.00	.00	.00	700	10	.36	74
3	2.0	.00	.00	.00	.00	.00	.00	.00	500	9.0	.52	70
4	2.0	.00	.00	.00	.00	.00	.00	.00	400	7.6	.60	72
5	1.0	.00	.00	.00	.00	.00	.00	.00	300	7.6	.52	70
6	1.0	.00	.00	.00	.00	.00	.00	.00	240	7.2	.52	72
7	1.0	.00	.00	.00	.00	.00	.00	.00	220	6.6	.44	74
8	.50	.00	.00	.00	.00	.00	.00	.00	200	6.3	.44	70
9	.50	.00	.00	.00	.00	.00	.00	.00	180	5.1	.60	69
10	.00	.00	.00	.00	.00	.00	.00	.00	170	4.8	.60	65
11	.00	.00	.00	.00	.00	.00	.00	.00	160	4.5	.52	61
12	.00	.00	.00	.00	.00	.00	.00	.00	150	3.7	.52	59
13	.00	.00	.00	.00	.00	.00	.00	.00	131	3.0	.52	55
14	.00	.00	.00	.00	.00	.00	.00	.00	118	2.6	.52	46
15	.00	.00	.00	.00	.00	.00	.00	5.0	102	2.4	.60	50
16	.00	.00	.00	.00	.00	.00	.00	10	84	1.6	.68	44
17	.00	.00	.00	.00	.00	.00	.00	8.0	74	1.1	.60	36
18	.00	.00	.00	.00	.00	.00	.00	6.0	61	1.1	.68	34
19	.00	.00	.00	.00	.00	.00	.00	4.0	51	.78	.78	40
20	.00	.00	.00	.00	.00	.00	.00	2.0	44	.60	1.1	32
21	.00	.00	.00	.00	.00	.00	.00	2.0	38	.52	1.4	28
22	.00	.00	.00	.00	.00	.00	.00	1.0	29	.52	2.4	25
23	.00	.00	.00	.00	.00	.00	.00	1.0	23	.44	3.2	23
24	.00	.00	.00	.00	.00	.00	.00	.00	20	.36	7.2	22
25	.00	.00	.00	.00	.00	.00	.00	.00	20	.30	11	21
26	.00	.00	.00	.00	.00	.00	.00	.00	21	.36	13	23
27	.00	.00	.00	.00	.00	.00	.00	50	19	.44	34	23
28	.00	.00	.00	.00	.00	.00	.00	200	17	.60	53	22
29	.00	.00	.00	.00	---	.00	.00	150	15	.68	56	21
30	.00	.00	.00	.00	---	.00	.00	120	12	.60	58	20
31	.00	---	.00	.00	---	.00	---	1100	---	.52	67	---
TOTAL	13.00	.00	.00	.00	.00	.00	.00	1659.00	4890	101.92	317.76	1393
MEAN	.42	.000	.000	.000	.000	.000	.000	53.5	163	3.29	10.3	46.4
MAX	3.0	.00	.00	.00	.00	.00	.00	1100	800	11	67	74
MIN	.00	.00	.00	.00	.00	.00	.00	.00	12	.30	.36	20
CFSM	.002	.000	.000	.000	.000	.000	.000	.30	.93	.02	.06	.26
IN.	.00	.00	.00	.00	.00	.00	.00	.35	1.04	.02	.07	.29
AC-FT	26	.00	.00	.00	.00	.00	.00	3290	9720	202	630	2760

CAL YR 1978 TOTAL 20596.44 MEAN 56.4 MAX 4230 MIN .00 CFSM .32 IN 4.35 AC-FT 40850
WTR YR 1979 TOTAL 8383.68 MEAN 23.0 MAX 1100 MIN .00 CFSM .13 IN 1.77 AC-FT 16630

NOTE.--No gage-height record prior to May 26.

15904900 ATIGUN RIVER TRIBUTARY NEAR PUMP STATION 4

LOCATION.--Lat 68°22'25", long 149°18'48", in NE¼SE¼ sec.28, T.12 S., R.12 E., North Slope Borough, Hydrologic Unit 19010001, on right bank 0.2 mi (0.3 km) upstream from culvert at mile 191 on TAPS haul road, 0.9 mi (1.4 km) above mouth and 4 mi (6 km) south of Pump Station 4.

DRAINAGE AREA.--32.6 mi² (84.4 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,790 ft (850 m), from topographic map.

REMARKS.--Records estimated and poor during period of no gage-height record prior to May 25 and fair thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 593 ft³/s (16.8 m³/s) July 27, 1979, gage height, 13.58 ft (4.139 m), from rating curve extended above 260 ft³/s (7.4 m³/s) on basis of slope-area measurement at a gage height of 14.5 ft (4.42 m); no flow during winter periods.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 29-30, 1976 reached a stage of 14.5 ft (4.42 m), from floodmarks, discharge, 1,000 ft³/s (28.3 m³/s), from slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 593 ft³/s (16.8 m³/s) July 27, gage height, 13.58 ft (4.139 m) from rating curve extended as explained above; no flow Oct. 23 to Apr. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	.00	.00	.00	.00	.00	.00	2.0	17	122	190	91
2	7.0	.00	.00	.00	.00	.00	.00	4.0	28	127	157	81
3	6.0	.00	.00	.00	.00	.00	.00	5.0	52	160	164	71
4	6.0	.00	.00	.00	.00	.00	.00	5.0	60	189	167	60
5	5.0	.00	.00	.00	.00	.00	.00	4.0	70	279	208	50
6	5.0	.00	.00	.00	.00	.00	.00	3.0	80	144	241	43
7	4.0	.00	.00	.00	.00	.00	.00	2.0	103	127	176	38
8	4.0	.00	.00	.00	.00	.00	.00	2.0	82	104	142	35
9	4.0	.00	.00	.00	.00	.00	.00	2.0	103	105	116	30
10	3.0	.00	.00	.00	.00	.00	.00	1.0	129	91	108	28
11	3.0	.00	.00	.00	.00	.00	.00	1.0	78	71	102	25
12	3.0	.00	.00	.00	.00	.00	.00	1.0	34	59	90	22
13	2.0	.00	.00	.00	.00	.00	.00	1.0	20	67	92	20
14	2.0	.00	.00	.00	.00	.00	.00	1.0	14	86	98	18
15	2.0	.00	.00	.00	.00	.00	.00	1.0	14	105	84	16
16	2.0	.00	.00	.00	.00	.00	.00	1.0	21	122	79	14
17	2.0	.00	.00	.00	.00	.00	.00	2.0	43	130	76	13
18	1.0	.00	.00	.00	.00	.00	.00	2.0	127	121	67	12
19	1.0	.00	.00	.00	.00	.00	.00	2.0	190	118	66	11
20	1.0	.00	.00	.00	.00	.00	.00	2.0	179	115	68	10
21	1.0	.00	.00	.00	.00	.00	.00	3.0	126	104	51	11
22	1.0	.00	.00	.00	.00	.00	.00	3.0	129	97	54	11
23	.00	.00	.00	.00	.00	.00	.00	4.0	74	104	68	12
24	.00	.00	.00	.00	.00	.00	.00	8.0	104	105	70	12
25	.00	.00	.00	.00	.00	.00	.00	12	118	171	78	11
26	.00	.00	.00	.00	.00	.00	.00	18	72	217	71	10
27	.00	.00	.00	.00	.00	.00	.00	14	59	325	79	10
28	.00	.00	.00	.00	.00	.00	.00	9.5	55	440	103	9.0
29	.00	.00	.00	.00	---	.00	.00	7.0	52	261	128	9.0
30	.00	.00	.00	.00	---	.00	.00	6.0	86	166	122	8.0
31	.00	---	.00	.00	---	.00	---	10	---	172	103	---
TOTAL	72.00	.00	.00	.00	.00	.00	.00	138.5	2319	4604	3418	791.0
MEAN	2.32	.000	.000	.000	.000	.000	.000	4.47	77.3	149	110	26.4
MAX	7.0	.00	.00	.00	.00	.00	.00	18	190	440	241	91
MIN	.00	.00	.00	.00	.00	.00	.00	1.0	14	59	51	8.0
CFSM	.07	.000	.000	.000	.000	.000	.000	.14	2.37	4.57	3.37	.81
IN.	.08	.00	.00	.00	.00	.00	.00	.16	2.65	5.25	3.90	.90
AC-FT	143	.00	.00	.00	.00	.00	.00	275	4600	9130	6780	1570

CAL YR 1978 TOTAL 10384.00 MEAN 28.4 MAX 289 MIN .00 CFSM .87 IN 11.85 AC-FT 20600
WTR YR 1979 TOTAL 11342.50 MEAN 31.1 MAX 440 MIN .00 CFSM .95 IN 12.94 AC-FT 22500

15904900 ATIGUN RIVER TRIBUTARY NEAR PUMP STATION 4--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976, 1978 and 1979.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	BICAR-BONATE (MG/L AS HCO3)
MAY						
23...	1515	3.8	170	7.8	6.5	66

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited stream-flow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are useable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in Alaska made at low-flow partial-record stations are given in the following table. These measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream when continuous records are available, will give a picture of the low-flow potentiality of a stream. For some stations, measurements made periodically through the year are also included. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1979

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Measurements	
					Date	Discharge (ft³/s)
		South-central Alaska				
15238800	Fish Creek at Seldovia	Lat 59°26'10", long 151°42'05", in S½ sec.32, T.8 S., R.14 W., Kenai Peninsula Borough, upstream from dam, 0.1 mi upstream from mouth, and 0.5 mi southeast of Seldovia.	3.83	a1967-68, a1970, a1972-73, 1978-79	10-11-78	26
					11- 3-78	17
					12- 7-78	20
					3-16-79	b2.7
					4-19-79	14
					5- 3-79	21
					5-17-79	14
					6- 1-79	26
					6-15-79	8.5
					7-20-79	b1.5
					8-17-79	18
15238810	Seldovia Lagoon tributary near Seldovia	Lat 59°26'30", long 151°41'05", in SW¼ sec.33, T.8 S., R.14 W., Kenai Peninsula Borough, upstream from reservoir, 0.9 mi upstream from mouth and 1.2 mi east of Seldovia.	0.93	a1967-68, a1970, [illegible]972-73, [illegible]978-79	10-11-78	6.3
					11- 3-78	4.7
					12- 7-78	7.0
					3-16-79	b0.28
					4-19-79	3.5
					5- 3-79	10
					5-17-79	7.8
					6- 1-79	7.6
					6-15-79	1.3
					7-20-79	b0.16
					8-17-79	3.2
15239300	Falls Creek near Homer	Lat 59°47'23", long 151°07'14", in SE¼ NW¼ sec.35, T.4 S., R.11 W., Kenai Peninsula Borough, 500 ft downstream from unnamed left bank tributary, and 17 mi northeast of Homer.	2.84	1978-79	10-10-78	3.8
					11- 9-78	2.3
					1-12-79	1.2
					3-16-79	b0.59
					4-19-79	2.5
					5- 1-79	19
					5-15-79	8.0
					5-30-79	3.7
					6-15-79	b1.8
					7-20-79	b1.4
					8-16-79	1.2
*15239500	Fritz Creek near Homer	Lat 59°42'30", long 151°20'35", in SW¼ sec.28, T.5 S., R.12 W., Kenai Peninsula Borough, at culvert on East Road and 9 mi northeast of Homer.	10.4	a1962-77, 1978-79	10-10-78	12
					11- 9-78	8.9
					1- 5-79	6.7
					3-14-79	b4.8
					4-17-79	14
					5- 1-79	53
					5-15-79	27
					5-30-79	11
					6-15-79	b5.0
					7-20-79	b4.9
					8-16-79	3.6

* Also crest-stage partial-record station
a Published in miscellaneous measurements table.
b Base flow.

					Measurements	
Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Date	Discharge (ft^3/s)
		South-central Alaska--Continued				
*15239800	Diamond Creek near Homer	Lat 59°40'10", long 151°40'00", in SE¼ sec.9, T.6 S., R.14 W., Kenai Peninsula Borough, at culvert on Sterling Highway, 1.3 mi upstream from mouth at Cook Inlet and 4.6 mi northwest of Homer.	5.35	a1962-77 1978-79	10- 9-78	7.9
					11- 9-78	5.7
					1- 5-79	3.6
					3-15-79	b2.0
					4-17-79	9.7
					5- 1-79	36
					5-15-79	12
					5-30-79	4.3
					6-15-79	b2.1
					7-18-79	b1.7
					8-16-79	2.5
15239805	Anchor River near Homer	Lat 59°48'32", long 151°23'51", in NE¼ NE¼ sec.30, T.4 S., R.12 W., Kenai Peninsula Borough, 200 ft upstream from unnamed right bank tributary, and 12 mi north of Homer.	28.8	1978-79	10-11-78	26
					11- 8-78	22
					1-11-79	15
					3-14-79	b14
					4-18-79	18
					5- 2-79	217
					5-16-79	105
					5-31-79	54
					6-14-79	b23
					7-19-79	b19
					8-15-79	15
15239807	Anchor River tributary at mouth near Homer	Lat 59°48'35", long 151°23'56", in SE¼ SE¼ sec.19, T.4 S., R.12 W., Kenai Peninsula Borough, 500 ft upstream from mouth, and 12 mi north of Homer.	20.1	1978-79	10-11-78	25
					11- 8-78	24
					1-11-79	26
					3-14-79	b22
					4-18-79	24
					5- 2-79	123
					5-16-79	74
					5-31-79	40
					6-14-79	b22
					7-19-79	b21
					8-15-79	20
15239810	Anchor River above Beaver Creek near Homer	Lat 59°45'10", long 151°30'31", in SW¼ SW¼ sec.9, T.5 S., R.13 W., Kenai Peninsula Borough, 50 ft upstream from Beaver Creek, and 7.2 mi north of Homer.	63.2	1978-79	10-11-78	66
					11- 8-78	48
					1- 8-79	66
					3-14-79	b48
					4-18-79	62
					5- 2-79	e460
					5-16-79	245
					5-31-79	111
					6-14-79	b57
					7-19-79	b53
					8-15-79	51
15239818	Beaver Creek near Bald Mountain near Homer	Lat 59°44'59", long 151°19'44", in NE¼ NW¼ sec.16, T.5 S., R.12 W., Kenai Peninsula Borough, at bridge and 10 mi northeast of Homer.	5.41	1978-79	10-10-78	9.6
					11- 9-78	4.0
					1-12-79	2.0
					3-16-79	b1.0
					5- 2-79	76
					5-16-79	21
					5-30-79	6.5
					6-15-79	b2.3
					7-20-79	b2.7
					8-16-79	1.2
15239822	Beaver Creek at mouth near Homer	Lat 59°45'09", long 151°30'29", in SW¼ SW¼ sec.9, T.5 S., R.13 W., Kenai Peninsula Borough, 200 ft upstream from mouth, and 7.2 mi north of Homer.	19.8	1978-79	10-11-78	22
					11- 8-78	14
					1- 8-79	12
					3-14-79	b7.9
					4-18-79	25
					5-16-79	62
					5-31-79	31
					6-14-79	b14
					7-19-79	b10
					8-15-79	9.4

* Also crest-stage partial-record station.
a Published in miscellaneous measurements table.
b Base flow.
e Estimated.

					Measurements	
Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Date	Discharge (ft^3/s)
		South-central Alaska--Continued				
15239840	Anchor River above Twitter Creek near Homer	Lat 59°43'08", long 151°38'31", in NE¼ NW¼ sec.27, T 5 S., R.14 W., Kenai Peninsula Borough, 30 ft upstream from Twitter Creek, and 6.3 mi northwest of Homer.	105	1978-79	10-11-78	129
					11- 7-78	108
					1- 4-79	92
					3-19-79	b70
					4-17-79	126
					5- 1-79	683
					5-14-79	432
					5-30-79	192
					6-13-79	b89
					7-18-79	b88
					8-14-79	87
15239845	Twitter Creek near Lookout Mountain near Homer	Lat 59°42'00", long 151°28'38", in NE¼ SW¼ sec.34, T.5 S., R.13 W., Kenai Peninsula Borough, 200 ft upstream from old road crossing, and 3.9 mi northeast of Homer.	1.63	1978-79	10-10-78	1.4
					11- 9-78	2.1
					1-12-79	1.2
					3-19-79	b0.49
					4-17-79	1.0
					5- 3-79	14
					5-15-79	12
					5-30-79	4.2
					6-15-79	b1.5
					7-19-79	b0.88
					8-16-79	0.97
15239880	Twitter Creek near Homer	Lat 59°42'54", long 151°37'46", in SE¼ sec.27, T.5 S., R.14 W., Kenai Peninsula Borough, 0.6 mi upstream from mouth, and 5.7 mi northwest of Homer.	16.1	1971-73‡, 1978-79	10-11-78	13
					11- 7-78	21
					1- 4-79	12
					3-19-79	b5.5
					4-17-79	16
					5- 1-79	132
					5-14-79	95
					5-30-79	29
					6-13-79	b12
					7-18-79	b7.9
					8-14-79	10
15239970	North Fork Anchor River above Chakok River near Anchor Point	Lat 59°47'41", long 151°43'46", in SE¼ SW¼ sec.29, T.4 S., R.14 W., Kenai Peninsula Borough, 20 ft downstream from bridge, 0.4 mi upstream from Chakok River, and 3.8 mi east of Anchor Point.	18.4	1978-79	10-13-78	54
					11- 7-78	19
					1- 4-79	14
					3-20-79	b10
					4-17-79	29
					5- 1-79	121
					5-14-79	54
					5-29-79	24
					6-13-79	b13
					7-18-79	16
					8-14-79	20
15239980	Chakok River near Anchor Point	Lat 59°48'03", long 151°43'51", in NW¼ SW¼ sec.29, T.4 S., R.14 W., Kenai Peninsula Borough, 0.5 mi upstream from mouth, and 3.9 mi northeast of Anchor Point.	38.7	1978-79	10-13-78	65
					11- 7-78	42
					1- 4-79	21
					3-20-79	b14
					4-17-79	62
					5- 1-79	e180
					5-14-79	68
					5-29-79	30
					6-13-79	b19
					7-18-79	26
					8-14-79	29
15239990	North Fork Anchor River at mouth at Anchor Point	Lat 59°46'24", long 151°49'52", in SE¼ NE¼ sec.4, T.5 S., R.15 W., Kenai Peninsula Borough, 50 ft upstream from mouth at Anchor Point.	65.7	a1951-52, 1978-79	10-12-78	86
					11- 7-78	78
					1- 4-79	34
					3-20-79	b33
					4-16-79	138
					4-30-79	317
					5-14-79	146
					5-29-79	64
					6-13-79	b40
					7-18-79	44
					8-14-79	63

‡ Operated as a continuous-record station.
a Published in miscellaneous measurements table.
b Base flow.
e Estimated.

South-central Alaska--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Measurements Date	Measurements Discharge (ft³/s)
+15240000	Anchor River at Anchor Point	Lat 59°46'21", long 151°50'05", in SE¼ sec.4, T.5 S., R.15 W., Kenai Peninsula Borough, at Old Sterling Highway bridge at Anchor Point, 0.1 mi downstream from North Fork, and 1 mi upstream from mouth.	224 (revised)	1953-66‡, 1978-79	10-12-78	326
					11- 7-78	263
					1- 3-79	174
					3-12-79	b104
					4-16-79	449
					4-30-79	1,170
					5-14-79	762
					5-29-79	321
					6-13-79	b163
					7-18-79	b160
					8-14-79	182
15240200	Stariski Creek near Ninilchik	Lat 59°55'07", long 151°38'59", in SW¼ NW¼ sec.14, T.3 S., R.14 W., Kenai Peninsula Borough, 50 ft downstream from unnamed right bank tributary, and 8.8 mi south of Ninilchik.	27.8	1978-79	10-11-78	18
					11- 8-78	c7.1
					1-10-79	16
					3-13-79	b14
					4-18-79	28
					5- 2-79	124
					5-16-79	48
					5-31-79	25
					6-14-79	b16
					7-19-79	17
					8-15-79	16
#15240300	Stariski Creek near Anchor Point	Lat 59°51'09", long 151°47'17", in NW¼ NW¼ sec.12, T.4 S., R.15 W., Kenai Peninsula Borough, 100 ft downstream from culvert at Sterling Highway, and 5.5 mi north of Anchor Point.	49.4	a1951-52, 1978-79	10-12-78	34
					11- 7-78	53
					1- 4-79	35
					3-12-79	b24
					4-16-79	86
					4-30-79	204
					5-14-79	95
					5-29-79	41
					6-13-79	b24
					7-18-79	31
					8-14-79	32
15240400	Happy Creek at Happy Valley	Lat 59°56'16", long 151°44'06", in NW¼ NW¼ sec.8, T.3 S., R.14 W., Kenai Peninsula Borough, 20 ft upstream from culvert at Sterling Highway at Happy Valley and 0.4 mi upstream from mouth.	7.74	1978-79	10-13-78	16
					11- 7-78	13
					1- 4-79	6.7
					3-12-79	b4.3
					4-16-79	22
					4-30-79	47
					5-14-79	13
					5-29-79	6.9
					6-13-79	b5.2
					7-18-79	5.0
					8-14-79	7.4
15240600	Deep Creek above tributary 1 near Ninilchik	Lat 59°56'31", long 151°12'59", in SW¼ SW¼ sec.5, T.3 S., R.11 W., Kenai Peninsula Borough, 300 ft upstream from unnamed left bank tributary, 0.7 mi upstream from Cytex Creek, and 17 mi southeast of Ninilchik.	18.9	1978-79	10-11-78	19
					11- 8-78	10
					-10-79	11
					3-13-79	b7.8
					4-18-79	10
					5- 2-79	146
					5-16-79	79
					5-31-79	33
					6-14-79	b12
					7-19-79	14
					8-15-79	12
15240700	Deep Creek tributary 1 at mouth near Ninilchik	Lat 59°56'30", long 151°13'03", in SW¼ SW¼ sec.5, T.3 S., R.11 W., Kenai Peninsula Borough, 200 ft upstream from mouth, and 17 mi southeast of Ninilchik.	16.0	1978-79	10-11-78	15
					11- 8-78	10
					1-10-79	12
					3-13-79	b8.6
					4-18-79	8.5
					5- 2-79	137
					5-16-79	79
					5-31-79	36
					6-14-79	b8.1
					7-19-79	9.2
					8-15-79	10

‡ Operated as a continuous-record station.
+ See analyses of samples collected at water-quality partial-record stations.
# See analyses of samples collected at miscellaneous sites.
a Published in miscellaneous measurements table.
b Base flow.
c Water going into ice and channel storage; measurement does not represent basin yield.

Discharge measurements made at low-flow partial-record stations during water year 1979--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		South-central Alaska--Continued				
15240800	Deep Creek above North Fork near Ninilchik	Lat 59°58'56", long 151°14'48", in SW¼ SW¼ sec.19, T.2 S., R.11 W., Kenai Peninsula Borough, 200 ft upstream from North Fork, and 15 mi east of Ninilchik.	58.5	1978-79	10-11-78	56
					11- 8-78	c27
					1-10-79	31
					3-13-79	b29
					4-18-79	36
					5- 2-79	346
					5-16-79	212
					5-31-79	111
					6-14-79	b43
					7-19-79	46
					8-15-79	48
15240900	North Fork Deep Creek at mouth near Ninilchik	Lat 59°58'59", long 151°14'52", in SW¼ SW¼ sec.19, T.2 S., R.11 W., Kenai Peninsula Borough, 500 ft upstream from mouth, and 15 mi east of Ninilchik.	38.9	1978-79	10-11-78	43
					11- 8-78	c26
					1-10-79	34
					3-13-79	b35
					4-18-79	32
					5- 2-79	129
					5-16-79	129
					5-31-79	98
					6-14-79	b47
					7-19-79	42
					8-15-79	33
15241000	Deep Creek above South Fork near Ninilchik	Lat 59°57'52", long 151°29'22", in SW¼ NE¼ sec.34, T.2 S., R.13 W., Kenai Peninsula Borough, 50 ft upstream from South Fork, and 8.5 mi southeast of Ninilchik.	119	1978-79	10-11-78	129
					11- 8-78	c37
					1-11-79	88
					3-14-79	b104
					4-18-79	108
					5- 2-79	e590
					5-16-79	417
					5-31-79	246
					6-14-79	b120
					7-19-79	116
					8-15-79	106
15241100	South Fork Deep Creek at mouth near Ninilchik	Lat 59°57'47", long 151°29'20", in SW¼ NE¼ sec.34, T.2 S., R.13 W., Kenai Peninsula Borough, 0.2 mi upstream from mouth, and 8.5 mi southeast of Ninilchik.	29.4	1978-79	10-11-78	20
					11- 8-78	c9.9
					1-11-79	18
					3-14-79	b13
					4-18-79	19
					5- 2-79	128
					5-16-79	67
					5-31-79	36
					6-14-79	b16
					7-19-79	19
					8-15-79	21
15241200	Deep Creek above tributary 2 near Ninilchik	Lat 60°00'22", long 151°37'26", in SE¼ NE¼ sec.14, T.2 S., R.14 W., Kenai Peninsula Borough, 400 ft upstream from unnamed right bank tributary, and 3.2 mi southeast of Ninilchik.	161	1978-79	10- 9-78	311
					10-12-78	237
					11- 9-78	129
					1-11-79	106
					3-13-79	b99
					4-18-79	142
					5- 2-79	e930
					5-16-79	e560
					5-31-79	334
					6-14-79	b134
					7-19-79	140
					8-15-79	122
15241300	Deep Creek tributary 2 at mouth near Ninilchik	Lat 60°00'26", long 151°37'23", in SE¼ NE¼ sec.14, T.2 S., R.14 W., Kenai Peninsula Borough, 100 ft upstream from mouth, and 3.2 mi southeast of Ninilchik.	35.6	1978-79	10- 9-78	30
					10-12-78	20
					11- 9-78	18
					1-11-79	13
					3-13-79	b10
					4-18-79	25
					5- 2-79	153
					5-16-79	53
					5-31-79	20
					6-14-79	b14
					7-19-79	17
					8-15-79	15

b Base flow.
c Water going into ice and channel storage; measurement does not represent basin yield.
e Estimated.

Discharge measurements made at low-flow partial-record stations during water year 1979--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		South-central Alaska--Continued				
15241400	Clam Creek near Ninilchik	Lat 60°00'39", long 151°39'22", in NE¼ NE¼ sec.15, T.2 S., R.14 W., Kenai Peninsula Borough, 0.6 mi upstream from mouth, and 2.6 mi south of Ninilchik.	20.0	1978-79	10- 9-78	25
					11- 7-78	14
					1- 3-79	12
					3-20-79	b8.2
					4-16-79	28
					4-30-79	70
					5-14-79	47
					5-29-79	18
					6-13-79	b11
					7-18-79	15
					8-14-79	14
#15241500	Deep Creek near Ninilchik	Lat 60°01'50", long 151°40'50", on line between sec.3 and 4, T.2 S., R.14 W., Kenai Peninsula Borough, at bridge on Sterling Highway, 1 mi upstream from mouth, and 1.5 mi southwest of Ninilchik.	220	a1951-52, a1954, a1959-61, a1965-68, 1978-79	10-12-78	284
					11- 7-78	177
					1- 3-79	152
					3-12-79	b111
					4-16-79	209
					4-30-79	851
					5-14-79	834
					5-29-79	553
					6-13-79	b188
					7-18-79	214
					8-14-79	177
15241510	Ninilchik River above tributary 1 near Clam Gulch	Lat 60°09'55", long 151°19'09", in SE¼ NW¼ sec.23, T.1 N., R.12 W., Kenai Peninsula Borough, 30 ft upstream from unnamed right bank tributary, and 5.2 mi southeast of Clam Gulch.	19.5	1978-79	10-11-78	12
					11- 8-78	c5.7
					1-10-79	7.8
					3-13-79	b8.5
					4-18-79	13
					5- 2-79	45
					5-16-79	18
					5-31-79	10
					6-14-79	b9.4
					7-19-79	12
					8-15-79	8.9
15241520	Ninilchik River tributary 1 at mouth near Clam Gulch	Lat 60°09'56", long 151°19'09", in SE¼ NW¼ sec.23, T.1 N., R.12 W., Kenai Peninsula Borough, 40 ft upstream from mouth, and 5.2 mi southeast of Clam Gulch.	7.58	1978-79	10-11-78	4.4
					11- 8-78	2.6
					1-10-79	2.8
					3-13-79	b1.9
					4-18-79	6.7
					5-16-79	4.1
					5-31-79	2.9
					6-14-79	b2.0
					7-19-79	2.5
					8-15-79	2.6
15241530	Ninilchik River above tributary 2 near Ninilchik	Lat 60°06'25", long 151°28'56", in SE¼ NE¼ sec.10, T.1 S., R.13 W., Kenai Peninsula Borough, 10 ft upstream from unnamed right bank tributary, and 7.5 mi northeast of Ninilchik.	46.2	1978-79	10-11-78	37
					11- 8-78	c17
					1-10-79	22
					3-13-79	b23
					4-18-79	42
					5- 2-79	145
					5-16-79	44
					5-31-79	28
					6-14-79	b23
					7-19-79	31
					8-15-79	27
15241540	Ninilchik River tributary 2 at mouth near Ninilchik	Lat 60°06'26", long 151°28'57", in SE¼ NE¼ sec.10, T.1 S., R.13 W., Kenai Peninsula Borough, 10 ft upstream from mouth, and 7.5 mi northeast of Ninilchik.	6.08	1978-79	10-11-78	5.3
					11- 8-78	5.7
					1-10-79	2.7
					3-13-79	b2.6
					4-18-79	9.2
					5- 2-79	24
					5-16-79	7.8
					5-31-79	4.1
					6-14-79	b2.6
					7-19-79	3.2
					8-15-79	3.1
15241550	Ninilchik River above tributary 3 near Ninilchik	Lat 60°03'24", long 151°32'53", in SW¼ SE¼ sec.29, T.1 S., R.13 W., Kenai Peninsula Borough, 300 ft upstream from unnamed left bank tributary, and 4.0 mi east of Ninilchik.	59.2	1978-79	10-11-78	46
					11- 8-78	14
					1-11-79	20
					3-14-79	b25
					4-18-79	64
					5- 2-79	163
					5-16-79	55
					5-31-79	37
					6-14-79	b29
					7-19-79	37
					8-15-79	35

# See analyses of samples collected at miscellaneous sites.
a Published in miscellaneous measurements table.
b Base flow.

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Measurements	
					Date	Discharge (ft³/s)
		South-central Alaska--Continued				
15241570	Ninilchik River tributary 3 near Ninilchik	Lat 60°05'27", long 151°19'44", in SW¼ NW¼ sec.15, T.1 S., R.12 W., Kenai Peninsula Borough, 100 ft downstream from unnamed right bank tributary, and 12 mi east of Ninilchik.	22.7	1978-79	10-11-78	7.7
					11- 8-78	5.3
					1-10-79	5.6
					3-13-79	b2.1
					4-18-79	9.4
					5- 2-79	40
					5-16-79	26
					5-31-79	9.4
					6-14-79	b5.2
					7-19-79	7.8
					8-15-79	5.2
15241590	Ninilchik River tributary 3 at mouth near Ninilchik	Lat 60°03'26", long 151°32'48", in SW¼ SE¼ sec.29, T.1 S., R.13 W., Kenai Peninsula Borough, 300 ft upstream from mouth, and 4.0 mi east of Ninilchik.	56.8	1978-79	10-11-78	33
					11- 8-78	c9.0
					1-11-79	26
					3-14-79	b20
					4-18-79	47
					5- 2-79	164
					5-16-79	74
					5-31-79	41
					6-14-79	b24
					7-19-79	28
					8-15-79	26
15242080	Crooked Creek near Clam Gulch	Lat 60°08'16", long 151°10'30", in SE¼ NW¼ sec.34, T.1 N., R.11 W., Kenai Peninsula Borough, 500 ft downstream from unnamed left bank tributary, and 9.8 mi southeast of Clam Gulch.	21.9	1978-79	10-11-78	25
					11- 8-78	c7.2
					1-10-79	21
					3-13-79	b21
					4-18-79	23
					5- 2-79	45
					5-16-79	26
					5-31-79	23
					6-14-79	b19
					7-19-79	22
					8-15-79	19
#15242100	Crooked Creek near Kasilof	Lat 60°17'50", long 151°16'20", in NE¼ sec.1, T.2 N., R.12 W., Kenai Peninsula Borough, 50 ft downstream from culvert at Old Sterling Highway, 1.8 mi upstream from mouth, and 6.5 mi southeast of Kasilof.	53.8	a1951-52, a1973-77, 1978-79	10- 9-78	80
					11- 7-78	40
					1- 2-79	33
					3-12-79	b30
					4-16-79	96
					4-30-79	155
					5-14-79	81
					5-29-79	51
					6-13-79	b40
					7-18-79	51
					8-14-79	36
*15285000	Wasilla Creek near Palmer	Lat 61°38'47", long 149°11'45", in SW¼ sec.13, T.18 N., R.1 E., Matanuska-Susitna Borough, 60 ft upstream from culvert entrance on Wasilla Fishhook Road and 4.1 mi northeast of Palmer.	16.6	a1954-55, 1971 a1976-77 1978-79	5- 7-79	96
					5-24-79	49
					5-31-79	50
					7-16-79	72
#15290200	Nancy Lake tributary near Willow	Lat 61°41'17", long 149°57'58", in SE¼SE¼ sec.34, T.19 N., R.4 W., Matanuska-Susitna Borough, 10 ft upstream from culvert at Parks Highway, 0.3 mi upstream from mouth, and 4.5 mi southeast of Willow.	8.00	1978-79	10-17-78	7.6
#15294002	Willow Creek at Hatcher Pass Road near Willow	Lat 61°45'49", long 149°40'54", in NE¼ SW¼ sec.5, T.19 N., R.2 W., Matanuska-Susitna Borough, 0.2 mi downstream from old bridge crossing, 2.5 mi upstream from Peters Creek, and 12 mi east of Willow.	50.1	1978-79	10- 5-78	72
#15294007	Deception Creek above tributary near Houston	Lat 61°41'48", long 149°46'19", in SE¼ NW¼ sec.35, T.19 N., R.3 W., Matanuska-Susitna Borough, 0.2 mi upstream from unnamed left bank tributary and 4.8 mi northeast of Houston.	17.9	1978-79	10- 5-78	16
					7- 3-79	28
					7-24-79	31

# See analyses of samples collected at miscellaneous sites.
* Also crest-stage partial-record station.
a Published in miscellaneous measurements table.
b Base flow.
c Water going into ice and channel storage; measurement does not represent basin yield.

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Measurements Date	Measurements Discharge (ft³/s)
		South-central Alaska--Continued				
#15294008	Deception Creek tributary near Houston	Lat 61°41'40", long 149"46'21", in SE¼ NW¼ sec.35, T.19 N., R.3 W., Matanuska-Susitna Borough, 0.1 mi upstream from mouth and 4.7 mi northeast of Houston.	8.89	1978-79	10- 5-78 7- 3-79 7-24-79	8.9 10 16
#15294012	Willow Creek at Parks Highway near Willow	Lat 61°46'03", long 150°03'48", in SW¼ NE¼ sec.6, T.19 N., R.4 W., Matanuska-Susitna Borough, at bridge at Parks Highway, 0.9 mi downstream from Deception Creek, and 1.7 mi northwest of Willow.	233	1978-79	11-14-78 12-21-78 1-22-79 3-29-79 7-10-79 7-24-79 8- 8-79 9-14-79	c103 b161 b139 164 1,180 1,040 652 b205
*15294025	Moose Creek near Talkeetna	Lat 62°19'00", long 150°26'30", in NE¼ sec.30, T.26 N., R.7 W., Matanuska-Susitna Borough, at bridge on Petersville Road and 10.5 mi west of Talkeetna.	52.3	a1972-75, 1978-79	5- 9-79 8- 1-79	596 34
**15296554	Thumb River near Larsen Bay	Lat 57°21'26", long 153°59'41", in NW¼ SE¼ sec.31, T.32 S., R.29 W., on Kodiak Island, 600 ft upstream from inlet to Karluk Lake and 12.5 mi south of Larsen Bay.	25.3	1979	10-18-78 11-17-78 1-23-79 3-28-79 5-19-79 6-27-79 8- 6-79 9-19-79	327 60 63 85 151 118 31 24
		Yukon Alaska				
15511100	Hopper Creek near Fairbanks	Lat 64°53'33", long 147°24'42", Fairbanks North-Star Borough, in NE¼NE¼ sec.30, T.1 N., R.2 E., at downstream end of culvert on Chena Hot Springs Road, 2.5 mi upstream from mouth, and 9.5 mi northeast of Fairbanks.	2.25	1978-79	8-13-79	b0.0002
15511500	Steele Creek near Fairbanks	Lat 64°53'36", long 147°29'12", in SE¼ sec.23, T.1 N., R.1 E., Fairbanks North-Star Borough, 8 ft upstream from culvert at mi 4.5 on the Chena Hot Springs Highway, and 7.5 mi northeast of Fairbanks.	10.7	ad1967-74, 1976-79	8-13-79	b1.1
15512500	Columbia Creek near Fairbanks	Lat 64°53'29", long 147°32'39", in SW¼ NE¼NE¼E¼ sec.28, T.1 N., R.1 E., Fairbanks North-Star Borough, at downstream end of culvert at mi 2.6 on Chena Hot Springs Road, 1.0 mi upstream from Wigwam Creek and 6.1 mi northeast of Fairbanks.	f3.0	1976-79	8-13-79	b0.10
15514005	Isabella Creek near Fairbanks	Lat 64°53'10", long 147°40'30", in NE¼ NE¼SE¼ sec.26, T.1 N., R.1 W., Fairbanks North-Star Borough, at downstream end of culvert at mi 1.0 on Farmers Loop Road, 2.8 mi upstream from mouth and 3.1 mi north of Fairbanks.	f4.3	1976-79	8-10-79 8-14-79	b0.11 b0.12
15514010	Jusilla Creek near Fairbanks	Lat 64°53'59", long 147°42'59", in NE¼ NW¼SE¼ sec.22, T.1 N., R.1 W., Fairbanks North-Star Borough, at downstream end of culvert at mi 3.4 on Farmers Loop Road, 0.5 mi upstream from Creamers Field and 3.9 mi north of Fairbanks.	f1.6	1976-79	8-10-79 8-14-79	b0.02 b0.008
15514015	Grenac Creek near Fairbanks	Lat 64°53'53", long 147°45'13", in SE¼ NW¼SE¼ sec.21, T.1 N., R.1 W., Fairbanks North-Star Borough, at downstream end of culvert at mi 4.6 on Farmers Loop Road, 1.0 mi upstream from Creamers Field and 3.9 mi north of Fairbanks.	f1.3	a1967-68, 1976-79	8-10-79 8-14-79	b0.05 b0.06

See analyses of samples collected at miscellaneous sites.
** Also a continuous-record station for water temperature.
* Also crest-stage partial-record station.
a Published in miscellaneous measurements table.
b Base flow.
c Water going into ice and channel storage; measurement does not represent basin yield.
d Operated as a crest-stage partial-record station.
f Approximately.

Discharge measurements made at low-flow partial-record stations during water year 1978--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		Yukon Alaska--Continued				
15514023	Ester Creek near Ester	Lat 64°50'37", long 147°59'54", in SE¼ SE¼NW¼ sec.8, T.1 S., R.2 W., Fairbanks North Star Borough, 25 ft downstream from culvert on Parks Highway and 0.5 mi east of Ester.	f8.6	1979	8-14-79	b0.07
15514025	Eva Creek near Ester	Lat 64°50'47", long 147°59'34", in SW¼ NW¼NE¼ sec.8, T.1 S., R.2 W., Fairbanks North-Star Borough, 20 ft downstream from culvert on Parks Highway, 0.1 mi upstream from mouth, and 0.7 mi east of Ester.	f1.3	1978-79	8-14-79	b0.04
15514040	Happy Creek near College	Lat 64°51'47", long 147°52'22", in NW¼ NW¼NW¼ sec.1, T.1 S., R.2 W., Fairbanks North-Star Borough, 20 ft upstream from culvert on Parks Highway, at Ester Crossing, 0.6 mi upstream from mouth, and 2 mi west of College	f8.6	1978-79	8-14-79 8-30-78	b0.12 .10
15540015	Goldstream Creek near Fox	Lat 64°56'52", long 147°40'21", in SW¼ NW¼NW¼ sec.1, T.1 N., R.1 W., Fairbanks North-Star Borough, 30 ft upstream from bridge on Goldstream Road, 0.6 mi upstream from Engineer Creek and 2 mi southwest of Fox.	41.4	1978-79	8-10-79 8-13-79	b17 b16
15540023	Engineer Creek near mouth near Fox	Lat 64°56'23", long 147°39'00", in NW¼ SE¼SE¼ sec.1, T.1 N., R.1 E., Fairbanks North-Star Borough, 25 ft upstream from culvert on New Steese Highway and 1.6 mi southwest of Fox.	f7.1	1979	8-10-79 8-13-79	b0.33 b0.32
15540030	Big Eldorado Creek near College	Lat 64°56'43", long 147°47'49", in NE¼ SE¼NW¼ sec.5, T.1 N., R.1 W., Fairbanks North-Star Borough, at downstream end of culvert on Goldstream Road, 3 mi upstream from mouth and 6 mi north of College.	7.98	1978-79	8-10-79 8-13-79	b0.83 b0.65
15540035	O'Conner Creek near College	Lat 64°54'57", long 147°53'49", in SE¼ SE¼NW¼ sec.14, T.1 N., R.2 W., Fairbanks North-Star Borough, at bridge on Goldstream Road, 1.8 mi upstream from mouth, and 5 mi northwest of College.	12.4	a1967, 1978-79	8-10-79 8-13-79	b1.0 b0.91
15540040	Goldstream Creek near College	Lat 64°54'36", long 147°56'47", in SE¼ SE¼SE¼ sec.16, T.1 N., R.2 W., Fairbanks North-Star Borough, 100 ft downstream from bridge on Sheep Creek Road, 1.6 mi northwest of Happy, and 5.5 mi northwest of College.	96.7	a1967, 1978-79	8-14-79	b22
15540045	Moose Creek near Happy	Lat 64°55'30", long 147°59'10", in NW¼ SE¼SE¼ sec.8, T.1 N., R.2 W., Fairbanks North-Star Borough, 20 ft upstream from bridge on Murphy Dome Road, 1 mi upstream from mouth, and 3 mi northwest of Happy.	10.6	a1967, 1978-79	8-10-79 8-13-79	b1.1 b0.67

a Published in miscellaneous measurements table.
b Base flow.
f Approximately.

Crest-stage partial-record stations

The following table contains annual maximum discharge for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain, but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage gage partial-record stations during water year 1979

Station No.	Station Name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (ft)	Discharge (ft³/s)
		Southeast Alaska					
15054500	Bessie Creek near Auke Bay	Lat 58°35'30", long 134°54'00", in SE¼ sec.7, T.38 S., R.63 E., Juneau Borough, 1000 ft upstream from mouth of Yankee Cove on eastern shore of Lynn Canal, and 16.5 mi northwest of Auke Bay.	1.35	1966-79	11- 1-78	14.58	310
15057500	William Henry Creek near Auke Bay	Lat 58°44'46", long 135°14'25", about 600 ft upstream from mouth on western shore of Lynn Canal about 2 mi north of entrance to William Henry Bay, and 33 mi northwest of Auke Bay.	1.58	1966-79	1979	16.15	1,130
15081490	Yatuk Creek near Klawock	Lat 55°53'57", long 133°08'42", on Prince of Wales Island, in Tongass National Forest, 0.4 mi upstream from mouth of Naukati Bay, and 24 mi north of Klawock.	5.80	1971-79	1979	18.35	723
15081890	Natzuhini Creek near Hydaburg	Lat 55°17'18", long 132°49'18", in NE¼NE¼ sec.17, T.76 S., R.83 E., on Prince of Wales Island, in Tongass National Forest, 0.7 mi upstream from mouth of Natzuhini Bay, and 5.5 mi north of Hydaburg.	9.10	1971-79	11- -78	21.45	1,290
15086900	Red Creek near Point Baker	Lat 56°15'36", long 133°19'34", on Prince of Wales Island, in Tongass National Forest, 0.2 mi upstream from Red Bay tideflats, and 13 mi southeast of Point Baker.	11.2	1971-79	1979	19.05	1,390
15087250	Twin Creek near Petersburg	Lat 56°43'13", long 132°55'33", in NE¼NW¼ sec.35, T.59 S., R.79 E., on Mitkof Island, at Mitkof highway bridge 600 ft upstream from mouth of Wrangell Narrows and 6.5 mi south of Petersburg.	3.01	1966-79	1979	10.55	460
15087585	Twelvemile Creek near Petersburg	Lat 56°58'07", long 133°04'05", in NW¼SE¼ sec.31, T.56 S., R.77 E., on Kupreanof Island, in Tongass National Forest, 0.8 mi upstream from mouth at Fredrick Sound, and 10 mi northwest of Petersburg.	9.39	1972-79	10-18-78	13.03	1,460
15087595	Kadake Creek near Kake	Lat 56°46'45", long 134°00'42", in W½ SW¼ sec.1, T.59 S., R.72 E., on Kuiu Island, in Tongass National Forest, 1.5 mi upstream from mouth at Kadake Bay and 15 mi south of Kake.	43.6	1972-79	1979	a	a
15108250	Game Creek near Hoonah	Lat 58°03'02", long 135°29'21", in SE¼SE¼ sec.18, T.44 S., R.61 E., on Chichagof Island, in Tongass National Forest, 2 mi upstream from mouth and 4.5 mi southwest of Hoonah.	42.8	1970-79	11- 1-78	15.25	16,950
15108290	Gos Creek near Elfin Cove	Lat 58°11'49", long 136°03'07", in NW¼SW¼ sec.26, T.42 S., R.58 E., on Chichagof Island, in Tongass National Forest, 0.5 mi upstream from mouth behind Goose Island in Mud Bay and 11 mi east of Elfin Cove.	16.7	1973-79	11- 1-78	45.84	4,670

a Unknown.

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Annual maximum Gage height (ft)	Annual maximum Discharge (ft^3/s)
		South-central Alaska					
15198500	Station Creek near Mentasta	Lat 62°56'12", long 143°39'54", in SW¼ sec.2, T.13 N., R.9 E., on left bank, 0.3 mi upstream from wooden bridge on Mentasta Village Road, 1 mi west of Slana-Tok Highway, and 4 mi east of Mentasta.	15.3	1970-79	7- -79	11.45	(*)
15199000	Copper River Tributary near Slana	Lat 62°43'03", long 144°14'21", in SW¼ sec.23, T.11 N., R.6 E., on right bank 20 ft upstream from culvert at mi 51.8 on the Slana-Tok Highway and 9 mi west of Slana.	4.32	1963-79	6- -79	11.40	45
15201000	Dry Creek near Glennallen	Lat 62°08'49", long 145°28'31", in NE¼ sec.7, T.4 N., R.1 W., on right bank 500 ft upstream from culvert at mi 119 Richardson Highway and 3.3 mi north of Glennallen. (Formerly at culvert.)	11.4	1963-79	5- 5-79	d19.00	350
15201100	Little Nelchina River Tributary near Eureka Lodge	Lat 61°59'17", long 147°00'34", in NW¼ sec.2, T.2 N., R.10 W., Matanuska Susitna Borough, on right bank at mi 132 Glenn Highway and 6 mi northeast of Eureka Lodge.	7.81	1964-79	7-15-79	12.08	89
15208100	Squirrel Creek at Tonsina	Lat 61°40'05", long 145°10'26", in NW¼ sec.26, T.2 S., R.1 E., on right bank 150 ft upstream from highway bridge at mi 79.5 Richardson Highway, 0.3 mi northeast of Tonsina River bridge, 0.3 mi upstream from mouth, and 0.4 mi north of Tonsina.	70.5	1964-65, #1965-75, 1976-79	5- 2-79	2.12	520
15208200	Rock Creek near Tonsina	Lat 61°45'32", long 145°09'14", in NW¼ sec.25, T.1 S., R.1 E., on right bank at mi 86.1 Richardson Highway, and 6.7 mi north of Tonsina Lodge.	14.3	1966-79	5- 2-79	9.85	68
15209000	Chititu Creek near May Creek	Lat 61°22'12", long 142°40'50", in NW¼ sec.11, T.6 S., R.15 E., on right bank 10 ft below wooden bridge on May Creek-Dan Creek Road and 2 mi north of May Creek landing strip.	30.9	1973-79	7- -79	5.60	250
15209100	May Creek near May Creek	Lat 61°20'42", long 142°41'49", in SE¼ sec.15, T.6 S., R.15 E., on left bank 100 ft west of the May Creek-Dan Creek Road and 0.3 mi northwest of the north end of the May Creek landing strip.	10.4	1973-79	6- -79	6.01	90
15211700	Strelna Creek near Chitina	Lat 61°30'40", long 144°04'00", in NE¼ sec.22, T.4 S., R.7 E., 300 ft upstream from timber bridge on Chitina-McCarthy Road and 13 mi east of Chitina.	23.8	1971-79	7- -79	9.80	210
15211900	O'Brien Creek near Chitina	Lat 61°28'59", long 144°27'23", in NW¼NW¼ sec.35, T.4 S., R.5 E., 100 ft upstream from timber bridge on trail to Copper River gaging station, 0.1 mi upstream from mouth at Copper River, and 2.5 mi south of Chitina.	44.8	1970-79	6- -79	4.03	360
15212500	Boulder Creek near Tiekel	Lat 61°20'08", long 145°18'26", in NW¼ sec.19, T.6 S., R.1 E., on right upstream wingwall at mi 51.4 Richardson Highway, and 0.7 mi north of Tiekel.	9.80	1963-79	7- -79	8.39	150
15236200	Shakespeare Creek at Whittier	Lat 60°46'35", long 148°43'35", in NE¼ sec.22, T.8 N., R.4 E., on upstream right wingwall of concrete bridge 0.5 mi upstream from mouth, and 1.8 mi west of the Alaska railroad terminal building at Whittier.	3.05	1969-79	9-13-79	12.81	620

# Operated as a continuous-record station.
* To be determined.
d At new site and datum.

Annual maximum discharge at crest-stage gage partial-record stations during water year 1979--Continued

Station No.	Station Name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (ft)	Discharge (ft³/s)
		South-central Alaska--Continued					
15237400	Chalmers River near Cordova	Lat 60°13'10", long 147°13'30", in SE¼ sec.32, T.1 N., R.13 E., on Montague Island, 1.2 mi upstream from mouth at Port Chalmers, and 58 mi southwest of Cordova.	6.32	1967-79	8-15-79	12.65	3,380
/15239500	Fritz Creek near Homer	Lat 59°42'30", long 151°20'35", in SW¼ sec.28, T.5 S., R.12 W., Kenai Peninsula Borough, on left bank 200 ft above culvert on East Road and 9 mi northeast of Homer.	10.4	1963-79	4-26-79	16.27	84
/15239800	Diamond Creek near Homer	Lat 59°40'10", long 151°40'00", in SE¼ sec.9, T.6 S., R.14 W., Kenai Peninsula Borough, on right upstream wingwall of culvert on Sterling Highway 1.3 mi upstream from mouth at Cook Inlet and 4.6 mi northwest of Homer.	5.35	1963-79	4-26-79	10.83	62
15240500	Cook Inlet Tributary near Ninilchik	Lat 59°58'45", long 151°43'20", in NE¼ sec.29, T.2 S., R.14 W., Kenai Peninsula Borough, on left upstream culvert wingwall on Sterling Highway 0.2 mi upstream from mouth at Cook Inlet and 5.4 mi southwest of Ninilchik.	5.19	1966-79	4-26-79	12.50	36
15243950	Porcupine Creek near Primrose	Lat 60°20'30", long 149°22'15", in NE¼ sec.24, T.3 N., R.1 W., Kenai Peninsula Borough, on right bank at 18-mi campground road 0.2 mi upstream from mouth at Kenai Lake and 0.8 mi west of Primrose.	16.8	1963-79	8- -79	11.01	700
15254000	Crescent Creek near Cooper Landing	Lat 60°29'49", long 149°40'38", in NW¼ sec.29, T.5 N., R.3 W., Kenai Peninsula Borough, on left bank at bridge on Old Seward-Kenai Highway, 4.2 mi downstream from Crescent Lake, and 4.4 mi east of Cooper Landing.	31.7	#1949-66, 1967-79	a	a	<140
15269500	Granite Creek near Portage	Lat 60°43'40", long 149°17'00", in NE¼ sec.4, T.7 N., R.1 E., Kenai Peninsula Borough, on upstream side of center pier of bridge on Seward-Anchorage Highway and 12 mi southwest of Portage.	28.2	1967-79	10-11-79	10.38	800
15271900	Cub Creek near Hope	Lat 60°52'12", long 149°26'02", in NW¼ sec.15, T.9 N., R.1 W., Kenai Peninsula Borough, on right wingwall of culvert on Hope Highway 0.1 mi upstream from mouth at Sixmile Creek and 7.7 mi southeast of Hope.	1.80	1965-79	6- -79	11.64	29
15272530	California Creek near Girdwood	Lat 60°57'53", long 149°08'02", in NW¼ sec.17, T.10 N., R.2 E., Municipality of Anchorage, at culverts on Alyeska Highway, 0.2 mi west of Girdwood Post Office, and 2.0 mi northeast of Seward-Anchorage Highway.	6.96	1967-79	8-17-79	15.18	160
15282400	Puritan Creek near Sutton	Lat 61°48'42", long 148°08'01", in NW¼ sec.23, T.20 N., R.7 E., Matanuska-Susitna Borough, on right bank below bridge at mi 89.3 Glenn Highway and 25.2 mi northeast of Sutton.	8.51	1963-79	8-17-79	7.60	100
15283500	Eska Creek near Sutton	**Lat 61°43'44", long 148°54'31", in NE¼ sec.21, T.19 N., R.3 E., Matanuska-Susitna Borough, on right bank 10 ft above culverts on Eska-Jonesville Road and 1.5 mi northeast of Sutton.	13.4	1965-69, 1971-79	7-15-79	11.72	205
/15285000	Wasilla Creek near Palmer	Lat 61°38'47", long 149°11'45", in SW¼ sec.13, T.18 N., R.1 E., Matanuska-Susitna Borough, on left bank 60 ft upstream from culvert entrance on Wasilla Fishhook Road and 4.1 mi northeast of Palmer.	16.6	1971, 1976-79	5- -79	10.69	190

/ Also low-flow partial-record station.
** Correction. Gage was moved in 1975.
# Operated as a continuous-record station.
< Less than.
a Unknown.

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Annual maximum Gage height (ft)	Annual maximum Discharge (ft^3/s)
		South-central Alaska--Continued					
15291100	Raft Creek near Denali	Lat 63°03'04", long 147°16'22", in SE¼ sec.36, T.21 S., R.2 E., Matanuska-Susitna Borough, on right bank above culverts at mi 69.2 Denali Highway and 10.7 mi southeast of Denali.	4.33	1963-79	9- -79	10.39	49
15292400	Chulitna River near Talkeetna	Lat 62°33'31", long 150°14'02", in SE¼ sec.32, T.29 N., R.5 W., on right bank 0.5 mi downstream from Parks Highway crossing, 4.5 mi downstream from Troublesome Creek, 16 mi northwest of Talkeetna, and 18 mi upstream from mouth.	2,570	#1958-72, 1973-77, 1979	9-21-79	12.20	35,700
15293000	Caswell Creek near Caswell	Lat 61°56'55", long 150°03'14", in SW¼ sec.32, T.22 N., R.4 W., Matanuska-Susitna Borough, above culvert on Parks Highway and 2.3 mi south of Caswell.	19.6	1963-79	5- 9-79	12.34	150
/15294025	Moose Creek near Talkeetna	Lat 62°19'00", long 150°26'30", in NE¼ sec.30, T.26 N., R.7 W., Matanuska-Susitna Borough, at bridge on Petersville Road and 10.5 mi west of Talkeetna.	52.3	1972-79	6-29-79	10.39	1,000
*15297475 (formerly 15297500)	Red Cloud Creek Tributary near Kodiak	Lat 57°49'00", long 152°37'20", in SW¼ sec.24, T.27 S., R.21 W., Kodiak Island Borough, 0.1 mi upstream from mouth and 8.4 mi northwest of Kodiak.	1.51	1963-79	9-12-79	12.74	370
		Southwest Alaska					
15300200	Roadhouse Creek near Iliamna	Lat 59°45'26", long 154°50'49", in SW¼ sec.11, T.5 W., R.32 W., at bridge on Iliamna Road and 2.1 mi east of Iliamna airport.	20.8	1973-79	5- -79	f13.02	<50
15302900	Moody Creek at Aleknagik	Lat 59°16'34", long 158°35'42", in SE¼ sec.30, T.10 S., R.55 W., on left bank 12 ft upstream from culvert entrance and 500 ft upstream from mouth at Wood River at the Aleknagik Mission.	1.28	1968-79	5- -79	18.43	27
15303010	Silver Salmon Creek near Aleknagik	Lat 59°13'34", long 158°40'21", in NW¼ sec.14, T.11 S., R.56 W., on right bank 4.5 mi upstream from mouth at Wood River and 4 mi southwest of Aleknagik.	4.46	1964-79	5-12-79	9.01	75
		Yukon Alaska					
15305900	Dennison Fork near Tetlin Junction	Lat 63°25'24", long 142°29'00", in SW¼ sec.14, T.19 N., R.15 E., on right bank 10 ft upstream from culvert at mi 10.7 Taylor Highway and 8.3 mi northeast of Tetlin Junction.	2.93	1963-79	5- -79	11.73	31
15305920	West Fork Tributary near Tetlin Junction	Lat 63°40'03", long 142°16'00", in SW¼ sec.23, T.22 N., R.16 E., on left bank 7 ft upstream from culvert at mi 32 Taylor Highway and 26.5 mi northeast of Tetlin Junction.	1.02	1966-79	7-22-79	11.00	30
15305950	Taylor Creek near Chicken	Lat 63°54'27", long 142°12'58", in NW¼ sec.35, T.25 N., R.16 E., on right bank 29 ft upstream from bridge at mi 50.3 Taylor Highway and 14.5 mi southwest of Chicken.	38.4	1966-79	9- 3-79	13.55	310
15341900	North Fork King Solomon Creek near Eagle	Lat 64°32'12", long 141°15'00", in SE¼ sec.26, T.4 S., R.32 E., 1,000 ft upstream from bridge at mi 135.8 Taylor Highway and 18 mi south of Eagle.	18.5	1963-69, 1975-79	6- -79	20.44	180

/ Also low-flow partial-record station.
* Revised.
# Operated as a continuous-record station.
< Less than.
f Ice effect.

Station No.	Station Name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (ft)	Dis-charge (ft³/s)
		Yukon Alaska--Continued					
15344000	King Creek near Dome Creek	Lat 64°23'38", long 141°24'43", in SW¼ sec.16, T.6 S., R.32 E., on left bank at mile 120 Taylor Highway, 1000 ft upstream from culvert at mi 119.8 Taylor Highway 0.4 mi upstream from mouth at O'Brien Creek, 4.09 mi east of Dome Creek, and 29 mi south of Eagle. (Formerly 900 ft downstream.)	5.99	1975-79	7- -77 5- -79	d12.32 d13.40	n124 159
15442500	Quartz Creek near Central	Lat 65°37'09", long 144°28'55", in SW¼ sec.7, T.9 N., R.16 E., on left bank 20 ft upstream from bridge at mi 138.5 Steese Highway 1 mi upstream from mouth at Crooked Creek, 10 mi east of Central, and 19 mi southwest of Circle.	17.2	1967, 1970-79	5- -79	17.36	58
15453610	Ray River Tributary near Stevens Village	Lat 65°56'57", long 150°55'00", in SE¼ sec.17, T.13 N., R.11 W., on right bank 10 ft upstream from culvert on TAPS haul road and 22 mi west of Stevens Village.	8.00	1977-79	5- -79	16.29	(+)
15457700	Erickson Creek near Livengood	Lat 65°34'30", long 148°56'18", in SE¼ sec.26, T.9 N., R.7 W., 100 ft downstream of culvert at mi 12.5 on the TAPS haul road and 12.5 mi northwest of Livengood.	26.3	1973-79	5-13-75 5-31-77 5- -78 5- -79	*19.91 *21.10 *15.53 19.53	*660 860 *115 600
15470300	Little Jack Creek near Nabesna	Lat 62°32'47", long 143°19'30", in SE¼ sec.22, T.9 N., R.11 E., on left bank 0.2 mi upstream from wooden bridge at mi 25.8 Nabesna Road and 15.6 mi northwest of Nabesna.	6.73	1975-79	9- 3-79	15.67	71
15470330	Chalk Creek near Nabesna	Lat 62°30'19", long 143°09'24", in NE¼ sec.3, T.8 N., R.12 E., on right bank 0.1 mi upstream from wooden bridge at mi 32.3 Nabesna Road and 10.3 mi northwest of Nabesna.	14.8	1975-79	*8-10-78 7-13-79	*18.00 16.98	*360 190
15470340	Jack Creek near Nabesna	Lat 62°27'52", long 143°06'18", in NW¼ sec.24, T.8 N., R.12 E., on left bank 0.1 mi above bridge on Nabesna Road and 7 mi northwest of Nabesna.	115	1975-79	9-11-75 8- -76 7- -77 6- -78 7-13-79	21.60 *19.19 20.85 19.49 20.80	2,440 *620 *1,830 n820 1,800
15471000	Bitters Creek near Northway Junction	Lat 63°09'38", long 142°05'20", in SE¼ sec.13, T.16 N., R.17 E., on left bank 52 ft upstream from culvert at mi 1,280 Alaska Highway 1 mi upstream from mouth at Tanana River and 13.5 mi northwest of Northway Junction.	15.4	1964-79	5- -79	12.11	140
15471500	Tanana River Tributary near Tetlin Junction	Lat 63°16'45", long 142°30'27", in SE¼ sec.3, T.17 N., R.15 E., on left bank 6 ft upstream from culvert at mi 1,297.8 Alaska Highway and 3.7 mi southeast of Tetlin Junction.	2.43	1965-79	5- -79	11.92	15
15473600	Log Cabin Creek at Log Cabin Inn	Lat 63°01'48", long 143°20'36", on right bank 20 ft upstream from bridge at mi 97.4 on the old section of the Slana-Tok Highway and 24.9 mi southwest of Tok.	10.7	1965-79	7-13-79	9.63	94
15473950	Clearwater Creek near Tok	Lat 63°10'19", long 143°12'03", in NE¼ sec.18, T.16 N., R.11 E., 0.8 mi upstream from culverts at mi 109.5 Glenn Highway and 12.5 mi southwest of Tok.	36.4	1963-79	6-20-79	45.68	135
15476049	Tanana River Tributary near Cathedral Rapids	Lat 63°24'24", long 143°48'28", in SE¼ sec.23, T.19 N., R.8 E., on left bank 0.3 mi upstream from culvert at mi 1,341 Alaska Highway 0.6 mi upstream from mouth at Tanana River and 2.5 mi northwest of Cathedral Rapids.	3.09	1970, 1973-79	7-15-79	13.47	66

* Revised.
+ To be determined.
d At new site and datum.
n Not previously published.

Annual maximum discharge at crest-stage gage partial-record stations during water year 1979--Continued

Station No.	Station Name	Location	Drainage area (mi²)	Period of record	Annual maximum Date	Annual maximum Gage height (ft)	Annual maximum Discharge (ft³/s)
		Yukon Alaska--Continued					
15476200	Tanana River Tributary near Dot Lake	Lat 63°41'40", long 144°17'40", in NW¼ sec.17, T.22 N., R.6 E., on left bank 20 ft upstream from culvert at mi 1,369 Alaska Highway and 7.4 mi west of Dot Lake.	11.0	1964-79	8- 2-79	10.58	e30
15476400	Dry Creek near Dot Lake	Lat 63°41'32", long 144°34'16", in NW¼ sec.24, T.14 S., R.16 E., on piling near right bank 64 ft above bridge at mi 1,378.1 Alaska Highway 0.6 mi upstream from mouth at Tanana River and 15.7 mi west of Dot Lake,	57.6	1963-65, #1965-69, 1969-79	8- 2-79	13.11	500
15478010	Rock Creek near Paxson	Lat 63°04'16", long 146°06'17", in NW¼ sec.30, T.21 S., R.9 E., at mi 24.8 Denali Highway and 18 mi west of Paxson.	50.3	1963-79	6-19-79	9.94	350
15478050	McCallum Creek near Paxson	Lat 63°13'27", long 145°38'56", in SW¼ sec.33, T.19 S., R.11 E., on right bank upstream wingwall 8 ft upstream from bridge at mi 202.4 Richardson Highway 0.5 mi upstream from mouth at Phelan Creek and 14.5 mi northwest of Paxson.	15.5	1966-79	7- 5-79	11.42	470
15478500	Ruby Creek near Donnelly	Lat 63°37'52", long 145°53'03", in NE¼ sec.7, T.15 S., R.10 E., on left bank 51 ft upstream from culvert at mi 234.8 Richardson Highway and 2.3 mi south of Donnelly.	5.32	1963-79	6-28-30-79	13.16	380
15480000	Banner Creek at Richardson	Lat 64°17'24", long 146°20'56", in SW¼ sec.22, T.7 S., R.7 E., Fairbanks North-Star Borough, on right bank 55 ft upstream from bridge at mi 295.4 Richardson Highway 0.1 mi upstream from mouth at Tanana River and 0.4 mi northwest of Richardson.	20.2	1963-79	5- -79	f15.13	a
15490000	Monument Creek at Chena Hot Springs	Lat 65°03'17", long 146°03'05", in SE¼ sec.26, T.3 N., R.8 E., Fairbanks North-Star Borough , on left bank 800 ft from lodge at Chena Hot Springs, 0.4 mi upstream from unnamed tributary, and 1.3 mi upstream from North Fork Chena River.	26.7	1967-79	5- 3-79	26.15	310
15515800	Seattle Creek near Cantwell	Lat 63°19'32", long 148°14'49", on line between sec.25 and 26, T.18 S., R.4 W., Matanuska-Susitna Borough, on left downstream wingwall of bridge at mi 110.9 Denali Highway and 22.4 mi southeast of Cantwell.	36.2	1963-65, #1966-75, 1976-79	6-19-79	48.86	390
15515900	Lily Creek near Cantwell	Lat 63°19'54", long 148°16'16", in NW¼ sec.26, T.18 S., R.4 W., Matanuska-Susitna Borough, 300 ft upstream from culvert at mi 11.9 Denali Highway and 20 mi southeast of Cantwell.	5.63	1965-79	6-19-79	22.36	64
15516000	Nenana River near Windy	Lat 63°27'28", long 148°48'11", in NE¼ sec.12, T.17 S., R.7 W., Matanuska-Susitna Borough, near left bank under bridge on Denali Highway, 0.8 mi upstream from Jack River, 1 mi southeast of Windy railroad station, and 2 mi downstream from Schist Creek.	710	#1950-56, #1958-73, 1974-77, 1979	7- -79	5.64	5,460
15516200	Slime Creek near Cantwell	Lat 63°30'34", long 148°48'39", in SE¼ sec.24, T.16 S., R.7 W., on left bank upstream from culvert on Parks Highway and 9.1 mi northeast of Cantwell.	6.90	1965-79	7-16-79	12.73	115
15518200	Rock Creek near Ferry	Lat 64°01'56", long 149°08'40", in SW¼ sec.21, T.10 S., R.8 W., at midchannel 42 ft upstream from culverts on the Parks Highway 0.3 mi upstream from mouth and 1.4 mi northwest of Ferry.	8.17	1964-79	6-29-79	10.93	500

#	Operated as a continuous-record station.
a	Unknown.
e	Estimated.
f	Ice effect.

Annual maximum discharge at crest-stage gage partial-record stations during water year 1979--Continued

Station No.	Station Name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (ft)	Discharge (ft³/s)
		Yukon Alaska--Continued					
15518250	Birch Creek near Rex	Lat 64°10'35", long 149°17'26", in SW¼ sec.35, T.8 S., R.9 W., on left bank 20 ft upstream from culvert on the Parks Highway and 4.2 mi south of Rex.	4.10	1964-79	5- -79	9.91	76
15519200	Brooks Creek Tributary near Livengood	Lat 65°23'02", long 148°56'12", on line between sec.2, T.6 N., R.7 W., and sec. 35, T.7 N., R.7 W., on right bank 20 ft upstream from culvert at mi 84 Elliot Highway and 15 mi southwest of Livengood.	7.81	1964-79	5- -79	11.01	98
15520000	Idaho Creek near Miller House	Lat 65°21'13", long 146°09'33", in NW¼ sec.17, T.6 N., R.8 E., Fairbanks North-Star Borough, on right bank 100 ft downstream from culverts at mi 79 Steese Highway and 30 mi southwest of Miller House.	5.31	1963-79	5- -79	14.70	66
15541600	Globe Creek near Livengood	Lat 65°17'08", long 148°07'56", 0.1 mi upstream from culverts at mi 38 Elliot Highway 9 mi upstream from mouth and 19 mi southeast of Livengood.	23.0	1964-79	5- -79	14.35	220
15564868	Snowden Creek near Wiseman	Lat 67°44'16", long 149°45'10", in SW¼ sec.26, T.34 N., R.10 N., on right bank 20 ft upstream from culvert on the TAPS haul road and 24.5 mi northeast of Wiseman.	16.7	1977-79	5- -79	24.73	367
15564872	Nugget Creek near Wiseman	Lat 67°29'25", long 144°52'20", in NW¼ sec.3, T.31 N., R.10 W., on right bank 300 ft upstream from culvert at the TAPS haul road and 8.7 mi northeast of Wiseman.	9.47	1975-79	5- -79	16.07	145
15564875	Middle Fork Koyukuk River near Wiseman	Lat 67°26'18", long 150°04'30", in SE¼ sec.7, T.30 N., R.11 W., near midspan on downstream side of bridge on TAPS haul road, 1.4 mi upstream from Minnie Creek, 1.9 mi downstream from Hammond River, 2.1 mi north of Wiseman and 2.5 mi upstream from Wiseman Creek.	*1,200	1968, #1971-78, 1979	5- -79	9.20	10,000
15564877	Wiseman Creek at Wiseman	Lat 67°24'38", long 150°06'21", in SE¼ sec.24, T.30 N., R.12 W., on left abutment of footbridge at mouth, 0.2 mi from north end of landing strip at Wiseman.	49.2	#1971-78, 1979	5- -79	4.62	308
15564884	Prospect Creek near Prospect Camp	Lat 66°46'56", long 150°41'06", in NW¼ sec.31, T.23 N., R.14 W., on right bank 200 ft upstream from bridge on the TAPS haul road, 0.4 mi downstream from TAPS pipeline crossing, 1.5 mi upstream from mouth, and 2.1 mi south of Pump Station 5.	110	1975-79	5- -79	8.80	3,800
15564887	Bonanza Creek Tributary near Prospect Camp	Lat 66°36'52", long 150°41'24", in SE¼ sec.25, T.21 N., R.15 W., on right bank 0.3 mi downstream from culverts on the TAPS haul road, 3.4 mi upstream from mouth, and 13.5 mi south of Pump Station 5.	11.7	1975-79	7-22-79	17.32	87
		Northwest Alaska					
15585000	Goldengate Creek near Nome	Lat 64°26'03", long 165°02'46", in SW¼ sec.15, T.12 S., R.32 W., on right bank 500 ft upstream from culvert on Nome-Council Road and 11 mi southeast of Nome.	1.55	1965 1976-79	6- 4-79	11.62	35
15619000	Dexter Creek near Nome	Lat 64°35'11", long 165°16'39", in NE¼ sec.33, T.10 S., R.33 W., on left bank 10 ft upstream from culvert on Nome-Teller Road 0.2 mi upstream from mouth and 7 mi northeast of Nome.	2.99	1976-79	6-22-78 6- -79	n16.18 f15.99	n64 a

* Revised.
# Operated as a continuous-record station.
a Unknown.
f Ice effect.
n Not previously published.

Annual maximum discharge at crest-stage gage partial-record stations during water year 1979--Continued

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (ft)	Discharge (ft^3/s)
		Northwest Alaska--Continued					
15624998	Arctic Creek above Tributary near Nome	Lat 64°38'16", long 165°42'42", in NE¼ sec.8, T.10 S., R.35 W., on right bank 300 ft upstream from culvert on Nome-Teller Road 1 mi upstream from mouth and 13 mi northwest of Nome.	1.13	1975, 1979	7-10-75 8- 4-79	a d17.95	117 55
15633000	Washington Creek near Nome	Lat 64°42'52", long 165°49'13", in NW¼ sec.14, T.9 S., R.35 W., on right bank upstream from culvert on Nome-Teller road and 19 mi northwest of Nome.	6.34	1964-79	6- -79	f13.58	a
15668100	Star Creek near Nome	Lat 64°55'40", long 164°57'39", in NW¼ sec.33, T.6 S., R.31 W., on right bank upstream from culvert at mi 40.5 Nome-Taylor road 0.9 mi upstream from mouth and 32 mi northeast of Nome.	3.78	1964-79	7- 3-79	10.16	70
		Arctic Slope Alaska					
15905000	Galbraith Lake Tributary near Galbraith Camp	Lat 68°29'30", long 149°30'36", in NE¼ sec.15, T.11 S., R.11 E., 0.4 mi upstream from culvert on the road to Galbraith Camp and 2.8 mi northwest of Galbraith.	7.55	1975-79	7-27-79	30.20	e46
15906000	Sagavanirktok River Tributary near Pump Station 3	Lat 68°41'13", long 149°05'42", in NE¼ SW¼ sec.4, T.9 S., R.13 E., North-Slope Borough on left bank 30 ft upstream from culverts on TAPS haul road, 16.5 mi upstream from mouth, and 14 mi south of Pump Station 3.	28.4	1979	6- -79	19.99	(+)
15910000	Sagavanirktok River near Sagwon	Lat 69°05'24", long 148°45'34", North Slope Borough, on right bank 0.6 mi south of Sagwon and 33.5 mi upstream from Ivishak River.	2,208	#1970-78, 1979	5- -79	14.30	10,800
15910200	Happy Creek at Happy Valley	Lat 69°08'50", long 148°49'50", in SE¼ sec.30, T.3 S., R.14 E., North-Slope Borough, on right bank at Happy Valley Camp 1 mi upstream from mouth and 17.5 mi south of Sagwon.	34.5	1972-79	6- 79	15.67	400

Operated as a continuous-record station.
+ To be determined.
a Unknown.
d At new site.
e Estimated.
f Ice effect.

Discharge measurements made at miscellaneous sites during water year 1979

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Southeast Alaska				
/Big Sore Creek	Greens Creek	Lat 58°05'00", long 134°37'19", about 150 ft upstream from confluence with Greens Creek, 6.9 mi upstream from mouth of Greens Creek, and 19 mi southwest of Juneau.	--	1978	8-16-79	3.2
/East Mine Drainage Creek	Greens Creek	Lat 58°05'00", long 134°37'33", about 75 ft upstream from confluence with Greens Creek, 6.7 mi upstream from mouth and 19 mi southwest of Juneau.	--	--	8-16-79	0.43
/West Mine Drainage above Tributary	Greens Creek	Lat 58°04'47", long 134°37'56", about 300 ft above West Mine Drainage Creek, 6.2 mi upstream from mouth and 19 mi southwest of Juneau.	--	--	7-16-79	0.03
					8-16-79	0.01
/West Mine Drainage	Greens Creek	Lat 58°04'55", long 134°38'05", about 100 ft upstream from confluence with Greens Creek, 6.4 mi upstream from mouth and 19 mi southwest of Juneau.	--	--	7-16-79	0.57
					8-16-79	0.39
/Greens Creek	Hawk Inlet	Lat 58°04'44", long 134°38'37", about 200 ft upstream from Gallagher Creek, 6.1 mi upstream from mouth and 19 mi southwest of Juneau.	--	1978	8-16-79	38
		South-Central Alaska				
‡15208100 Squirrel Creek at Tonsina	Tonsina River	Lat 61°40'05", long 145°10'26", in NW¼ sec.26, T.2 S., R.1 E., 150 ft upstream from highway bridge at mi 79.5 Richardson Highway, 0.3 mi northeast of Tonsina River bridge, 0.3 mi upstream from mouth, and 0.4 mi north of Tonsina.	70.5	1964-65 #1965-75	7-14-76	32
					5-23-77	97
					7-05-77	137
					9-29-77	47
					5-03-78	62
					8-03-78	22
					5-03-79	223
					7-30-79	26
‡15211900 O'Brien Creek near Chitina	Copper River	Lat 61°28'59", long 144°27'23", in NW¼NW¼ sec.35, T.4 S., R.5 E., 100 ft upstream from timber bridge on trail to Copper River gaging station, 0.1 mi upstream from mouth at Copper River, and 2.5 mi south of Chitina.	44.8	1970-76	5-24-77	107
					7-06-77	576
					8-09-77	210
					9-28-77	74
					7-06-78	182
					5-03-79	47
					5-25-79	86
					6-26-79	184
‡15237400 Chalmers River	Port Chalmers	Lat 60°13'10", long 147°13'30", in SE¼ sec.32, T.1 N., R.13 E., on Montague Island, 1.2 mi upstream from mouth at Port Chalmers, and 58 mi southwest of Cordova.	6.32	1967-78	10-13-78	151
					9-28-79	132
/Bean Creek	Kenai River	Lat 60°29'38", long 149°50'26", in NE¼SW¼ sec.29, T.5 N., R.3 W., at bridge, 0.4 mi upstream from mouth, and 0.4 mi northwest of Cooper Landing.	--	1977-78	5-01-79	15
/Bean Creek	Kenai River	Lat 60°29'30", long 149°49'58", in SE¼ sec.29, T.5 N., R.3 W., at mouth, and 0.1 mi northwest of Cooper Landing.	--	1978	3-25-79	0.10
‡15269500 Granite Creek near Portage	East Fork Sixmile Creek	Lat 60°43'40", long 149°17'00", in NE¼ sec.4, T.7 N., R.1 E., at bridge on Seward-Anchorage Highway and 12 mi southwest of Portage.	28.2	--	(Listed below)	

9-04-67	130	5-22-69	811	7-11-72	272	7-26-73	242	6-15-76	435
5-27-68	331	9-12-69	150	9-01-72	147	10-05-73	70	9-24-76	394
6-05-68	283	10-10-69	410	10-10-72	56	6-17-74	374	6-30-77	568
8-04-68	107	11-10-70	113	5-12-73	92	5-15-75	258	6-14-78	553
10-25-68	52	10-06-71	79	6-18-73	401	7-11-75	489	6-06-79	298
5-12-69	90	6-01-72	260						

‡ Also a crest-stage partial-record station.
# Operated as a continuous-record station.
/ See analysis of samples collected at miscellaneous sites.

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		South-Central Alaska--Continued				
East Fork Sixmile Creek	Sixmile Creek	Lat 60°46'56", long 149°25'18", in NE¼SE¼ sec.15, T.8 N., R.1 W., 100 ft upstream from confluence with Canyon Creek and 12 mi southeast of Hope.	123	--	6-08-79 7-06-79 8-10-79 9-10-79	1,080 1,430 1,120 311
‡15293000 Caswell Creek near Caswell	Susitna River	Lat 61°56'55", long 150°03'14", in SW¼ sec.32, T.22 N., R.4 W., at culvert on Anchorage-Fairbanks Highway and 2.3 mi south of Caswell.	19.6	1963-76	5-09-79 7-31-79	150 24
/Peters Creek	Willow Creek	Lat 61°49'06", long 149°38'50", in SE¼SW¼ sec.16, T.20 N., R.3 W., 150 ft downstream from Purches Creek and 13 mi northeast of Willow.	--	--	7-24-79	465
Peters Creek	Willow Creek	Lat 61°47'35", long 149°42'29", in NE¼SW¼ sec.30, T.20 N., R.3 W., 0.8 mi upstream from mouth and 11 mi northeast of Willow.	86.4	--	3-14-78	34
Willow Creek	Susitna River	Lat 61°46'00", long 149°56'00", in SE¼ NE¼ sec.2, T.19 N., R.4 W., 2.2 mi downstream from gage and 3.6 mi northeast of Willow.	a170	--	7-11-79 8-08-79 9-14-79	918 564 174
/Unnamed Creek	Deception Creek	Lat 61°44'54", long 149°55'06", in NE¼SW¼ sec.12, T.19 N., R.4 W., at mouth and 4 mi east of Willow.	--	--	7-03-79 7-24-79	6.8 12
Unnamed Creek	Larsen Bay	Lat 57°32'10", long 153°59'00", in SE¼ NE¼ sec.31, T.30 S., R.29 W., on Kodiak Island, 0.3 mi downstream from diversion and 0.15 mi upstream from culvert at mouth at Larsen Bay.	a6.2	1978	10-19-78 5-20-79 6-26-79 8- 7-79 9-19-79	13 23 8.6 2.7 2.6
Unnamed Creek	Barling Bay	Lat 57°14'16", long 153°20'20", in SW¼ SE¼ sec.12, T.34 S., R.26 W., on Kodiak Island, 2.7 mi northwest of Old Harbor and 3.5 mi upstream from mouth.	a4.5	1978	6-26-79 9-18-79	70 39
Unnamed Creek	Mid-way Bay	Lat 57°17'26", long 153°17'13", on Kodiak Island, 0.5 mi downstream of unnamed lake outlet, downstream from confluence, and 6 mi north of Old Harbor.	a1.8	--	5-16-79 6-26-79 9-18-79	53 54 42
Hidden Basin Creek	Hidden Basin	Lat 56°35'42", long 153°00'45", in NW¼ sec.8, T.30 S., R.23 W., on Kodiak Island, 6.5 mi upstream from mouth and 20 mi south of Port Lions.	a3.0	1978	10-20-78 6-27-79	24 54
Shotgun Creek	Falls Creek	Lat 57°39'20", long 152°56'15", in NW¼ NW¼ sec.23, T.29 S., R.23 W., on Kodiak Island, 1.0 mi upstream from mouth and 14 mi south of Port Lions.	a1.9	1978	10-20-78 6-27-79 8- 8-79 9-18-79	16 34 38 31
Falls Creek	Kizhuyak River	Lat 57°40'08", long 152°56'00", in NW¼ NW¼ sec.14, T.29 S., R.23 W., on Kodiak Island, 0.5 mi upstream from Shotgun Creek, 1.6 mi upstream from mouth, and 14 mi south of Port Lions.	a4.3	1978	10-20-78 6-27-79 8- 8-79 9-18-79	43 88 62 65
Rolling Creek Creek	Kizhuyak River	Lat 56°41'40", long 152°54'00", in NW¼ sec.1, T.29 S., R.23 W., on Kodiak Island, 0.75 mi upstream from mouth and 12 mi south of Port Lions.	a2.1	--	8- 8-79 9-18-79	12 13
Kizhuyak River	Kizhuyak Bay	Lat 57°42'00", long 152°52'50", in SW¼ sec.32, T.28 S., R.22 W., on Kodiak Island, 2 mi upstream from mouth and 12 mi south of Port Lions.	a25	--	8- 8-79 8-10-79 9-18-79	280 689 285
Port Lions Creek	Settler Cove	Lat 57°51'52", long 152°53'25", in NW¼ SW¼ sec.5, T.27 S., R.22 W., on Kodiak Island, 200 ft downstream from unnamed tributary, 0.5 mi upstream from mouth, and 0.5 mi southeast of Port Lions.	a11	--	6-26-79 8- 7-79 9-18-79	15 1.9 74

‡ Also a crest-stage partial-record station.
/ See analysis of samples collected at miscellaneous sites.
a Approximately.

Discharge measurements made at miscellaneous sites during water year 1979

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft³/s)
		South-Central Alaska--Continued				
Port Lions Creek	Settler Cove	Lat 57°51'54", long 152°52'55"(revised), in NE¼SW¼ sec.5, T.27 S., R.22 W., on Kodiak Island, 15 ft upstream from culvert, 400 ft upstream from mouth and at Port Lions.	a11	1978	10-19-78	44
		Yukon Alaska				
/Sawmill Creek	Clearwater Creek (Groundwater recharge)	Lat 63°53'55", long 145°13'45", in NE¼SW¼ sec.5, T.12 S., R.13 E., at Alaska Highway Bridge and 18 mi southeast of Delta Junction.	--	--	6-20-79	5.2
Healy Creek	Nenana River	Lat 63°51'10", long 148°55'41", in S½SW¼ SE¼ sec.21, T.12 S., R.7 W., 0.3 mi upstream from mouth, 1.1 mi southeast of Healy, and 2.5 mi west of Suntrana	--	1977	7-13-78 10-19-78 11-30-78 8-16-79	191 167 116 273
		Northwest Alaska				
/Sadie Creek	Kotzebue Sound	Lat 66°48'39", long 162°32'51", in SW¼ SW¼ sec.3, T.16 N., R.18 W., at mouth, 6 mi south of Kotzebue.	--	1977	4-16-79 7-31-79 8-22-79	No flow 14 62
/Walker Lake outlet	Kobuk River	Lat 67°03'29", long 154°18'49", in sec.8, T.19 N., R.21 E., 0.5 mi downstream from Walker Lake and 70 mi east of Kobuk.	178	--	8-11-79	1,160
Kobuk River	Kotzebue Sound	Lat 67°01'37", long 154°20'36", in sec.19, T.19 N., R.21 E., 0.5 mi upstream from Walker Lake outlet and 68 mi east of Kobuk.	285	--	8-11-79	1,090
Nutuvukti Lake outlet	Kobuk River	Lat 66°57'19", long 154°35'50", in sec.13, T.18 N., R.19 E., at outlet 55 mi east of Kobuk.	a29	--	8-14-79	47
/Kobuk River	Kotzebue Sound	Lat 66°50'06", long 154°39'00", in sec. 35, T.17 N., R.19 E., 13 mi upstream from Reed River and 54 mi east of Kobuk.	714	--	8-13-79	2,380
//Reed River Hot Springs	Reed River	Lat 67°15'50", long 155°02'39", in sec.34, T.22 N., R.17 E., 6 mi upstream from Inyuilak Creek and 50 mi northeast of Kobuk.	--	--	8-15-79	0.30
/Reed River	Kobuk River	Lat 66°49'25", long 154°57'31", in sec.3, T.16 N., R.18 E., 0.5 mi upstream from mouth and 47 mi east of Kobuk.	364	--	8-15-79	1,640
Minakakosa Lake outlet	Kobuk River	Lat 66°54'23", long 155°00'44", in sec.6, T.17 N., R.18 E., at outlet 46 mi east of Kobuk.	a33	--	8-14-79	88
Kobuk River	Kotzebue Sound	Lat 66°46"36", long 155°10'18", in sec.22, T.16 N., R.17 E., 2 mi upstream from Sulakpoatokvik Creek and 42 mi east of Kobuk.	1,560	--	8-16-79	6,930
Lake Selby outlet	Kobuk River	Lat 66°51'04", long 155°41'04", in sec.25, T.17 N., R.14 E., at outlet 29 mi east of Kobuk.	113	--	8-16-79	332
Kobuk River	Kotzebue Sound	Lat 66°46'18", long 155°50'00", in sec.22, T.16 N., R.14 E., 1.5 mi downstream from Selby River and 26 mi southeast of Kobuk.	2,000	--	8-17-79	7,240
/Pah River	Kobuk River	Lat 66°44'30", long 156°03'48", in sec.33, T.16 N., R.13 E., 3 mi upstream from mouth and 23 mi southeast of Kobuk.	956	--	8-17-79	458
Mauneluk River	Kobuk River	Lat 66°52'40", long 156°16'45", in sec.17, T.17 N., R.12 E., 3 mi upstream from mouth and 15 mi east of Kobuk.	573	--	8-18-79	2,980

/ See analysis of samples collected at miscellaneous sites.
// See analysis of samples collected at springs.
a Approximately.

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
		Northwest Alaska--Continued				
Killak River	Kobuk River	Lat 66°48'54", long 156°05'00", in sec.4, T.16 N., R.13 E., 0.3 mi upstream from mouth and 20 mi southeast of Kobuk.	a42	--	8-18-79	92
Kollioksak Lake outlet	Kobuk River	Lat 66°59'43", long 156°26'31", in sec.3, T.18 N., R.11 E., at outlet 13 mi northeast of Kobuk.	a6.3	--	8-18-79	0.50
/Kogoluktuk River	Kobuk River	Lat 66°56'42", long 156°45'06", in sec.19, T.18 N., R.10 E., 1.5 mi upstream from mouth and 5 mi northeast of Kobuk.	626	--	8-19-79	2,540
/Kobuk River	Kotzebue Sound	Lat 66°54'12", long 156°53'06", in sec.3, T.17 N., R.9 E., 0.3 mi upstream from Kobuk.	4,170	--	8-24-79	21,900
/Ruby Creek	Shungnak River	Lat 67°04'36", long 156°56'12", in sec.5, T.19 N., R.9 E., 3 mi upstream from mouth and 11 mi north of Kobuk.	a13	--	8-21-79	80
Shungnak River	Kobuk River	Lat 66°56'47", long 157°19'03", in sec.22, T.18 N., R.7 E., 4 mi upstream from mouth and 12 mi northwest of Kobuk.	213	--	8-23-79	1,520
Ambler River	Kobuk River	Lat 67°09'18", long 156°32'23", in sec.10, T.20 N., R.6 E., 2.5 mi upstream from Redstone River and 9 mi northeast of Ambler.	716	--	8-19-79	5,030
Redstone River	Ambler River	Lat 67°12'01", long 157°36'05", in sec.20, T.21 N., R.6 E., 8.5 mi upstream from mouth and 10 mi northeast of Ambler.	211	--	8-22-79	1,100
Jade Creek	Kobuk River	Lat 67°10'49", long 158°07'47", in sec.35, T.21 N., R.3 E., 6 mi upstream from mouth and 9 mi northwest of Ambler.	a57	--	8-22-79	150
/Kobuk River	Kotzebue Sound	Lat 67°06'35", long 158°14'51", in sec.29, T.20 N., R.3 E., 1 mi downstream from Jade Creek and 10 mi west of Ambler.	6,725	--	8-28-79	50,800
Akillik River	Hunt River	Lat 67°14'22", long 158°28'05", in sec.8, T.21 N., R.2 E., 6 mi upstream from mouth and 18 mi northwest of Ambler.	303	--	8-22-79	3,700
/Kavet Creek	Kobuk River	Lat 67°07'24", long 159°01'30", in sec.23, T.20 N., R.2 W., 0.5 mi upstream from mouth and 35 mi northeast of Kiana.	a25	--	8-29-79	55
/Salmon River	Kobuk River	Lat 67°15'12", long 159°38'58", in sec.6, T.21 N., R.4 W., 2 mi upstream from Kitlik River and 25 mi northeast of Kiana.	515	--	8-23-79	4,400
/Kitlik River	Salmon River	Lat 67°14'30", long 159°40'06", in sec.12, T.21 N., R.5 W., 10 mi upstream from Kobuk River, 24 mi northeast of Kiana.	a98	--	8-23-79	851
		Arctic Slope Alaska				
‡15905000 Galbraith Lake Tributary	Galbraith Lake	Lat 68°29'30", long 149°30'36", in NE¼ sec.15, T.11 S., R.11 E., 0.4 mi upstream from culvert on the road to Galbraith Camp and 2.8 mi northwest of Galbraith.	7.55	--	6-17-76 7-25-76	16 6.0
†15880000 Colville River near Nuiqsut	Beaufort Sea	Lat 70°09'56", long 150°55'00", North Slope Borough, 1 mi downstream from Itkillik River, 4 mi southeast of Nuiqsut, and 25 mi upstream from mouth.	20,670	#1977	6-07-79 8-20-79 9-11-79	40,000 34,900 28,600

‡ Also a crest-stage partial-record station.
# Operated as a continuous-record station.
/ See analysis of samples collected at miscellaneous sites.
a Approximately.
† See analyses of samples collected at partial-record sites.

Fourth of July Creek seepage investigation--Seward

A series of discharge measurements were made April 25, 1979 on Fourth of July Creek, which drains into Resurrection Bay near Seward, to study channel gains and losses. The reach is 1.8 mi (2.9 km) in length and extends from the mouth of an unnamed tributary stream draining the Godwin Glacier basin to the mouth at tidewater. The measurements were made during a period of steady flow. Indicated gains or losses may be substantially in error as affected by small inaccuracies in open-channel measurements.

River Miles	Location	Drainage area (mi^2)	Meas. disch. (ft^3/s)	Gain or loss	Water temp. (°C)	Specific conductance (micromhos)
1.8	Lat 60°05'51", long 149°18'11", in NE¼NE¼ sec.17, T.1 S., R.1 E., 50 ft downstream from unnamed right bank tributary...	23.8	35.7	--	3.0	--
1.4	Lat 60°05'36", long 149°18'49", in SW¼NE¼ sec.17................	--	30.6	-5.1	3.5	110
0.9	Lat 60°05'24", long 149°19'29", in NW¼SW¼ sec.17................	--	17.8	-12.8	3.0	110
0.4	Lat 60°05'22", long 149°20'16", in NW¼SE¼ sec.18................	--	5.6	-12.2	4.0	110
0.0	Lat 60°05'14", long 149°20'58", in NE¼SW¼ sec.18, at mouth.....	25.6	14.9	+9.3	3.0	110
	Overall net loss..			-20.8		

SOUTH-CENTRAL ALASKA

Capps Creek basin low-flow investigation

A series of base-flow discharge measurements was made in the Capps Creek basin on August 24, 1978 as part of a program to investigate the water resources in certain coal-bearing areas of Alaska. This is the only series of baseflow discharge measurements that has been made in the basin.

The measurements are considered to represent summer base flow. Weather records at Beluga, located 25 mi southeast of the basin, show that no precipitation occurred for seven days prior to the measurements. Streamflow at the nearest recording gaging station, Chuitna River near Tyonek (15294450), had been in a recession for four days since a minor peak on August 20.

The measurements are listed in order proceeding downstream, and each tributary is inserted in the order in which it enters the main stream. Drainage areas shown were determined from recent U.S. Geological Survey topographic maps of a scale of 1:63,360 and contour interval of 100 ft.

Discharge measurements of Capps Creek and tributaries near Tyonek

Stream	Location	Drainage area (mi^2)	Measured discharge (ft^3/s)	Cfs per square mile ($ft^3/s/mi^2$)
Capps Creek.......	Lat 61°17'25", long 151°45'07", in SE¼NE¼ sec.22, T.14 N., R.14 W., 500 ft upstream from unnamed left bank tributary and 26 mi northwest of Tyonek.	0.80	1.00	1.25
Unnamed tributary.	Lat 61°17'25", long 151°45'11", in SE¼NE¼ sec.22, T.14 N., R.14 W., 80 ft upstream from mouth and 26 mi northwest of Tyonek.	0.66	0.57	0.86
Capps Creek.......	Lat 61°17'15", long 151°42'07", in NW¼SE¼ sec.24, T.14 N., R.14 W., 60 ft upstream from unnamed right bank tributary and 24 mi northwest of Tyonek.	2.02	2.56	1.27
Unnamed tributary.	Lat 61°17'12", long 151°42'08", in NW¼SE¼ sec.24, T.14 N., R.14 W., 60 ft upstream from mouth and 24 mi northwest of Tyonek.	0.82	0.88	1.07
Capps Creek.......	Lat 61°18'57", long 151°40'50", in NE¼SW¼ sec.7, T.14 N., R.13 W., 300 ft upstream from North Capps Creek and 25 mi northwest of Tyonek.	4.97	5.39	1.08
North Capps Creek.	Lat 61°18'09", long 151°45'04", in NE¼SE¼ sec.15, T.14 N., R.14 W., at about 1,500 ft elevation and 26 mi northwest of Tyonek.	2.23	2.69	1.21
Do.............	Lat 61°19'00", long 151°40'52", in NE¼SW¼ sec.7, T.14 N., R.13 W., 30 ft upstream from mouth and 25 mi northwest of Tyonek.	4.90	4.78	0.98
Capps Creek.......	Lat 61°19'45", long 151°39'56", in SE¼SE¼ sec.6, T.14 N., R.13 W., 1.2 mi downstream from North Capps Creek and 25 mi northwest of Tyonek.	10.52	10.78	1.02
Do.............	Lat 61°19'46", long 151°37'26", in NW¼SW¼ sec.4, T.14 N., R.13 W., 0.5 mi upstream from mouth and 24 mi northwest of Tyonek.	11.60 (revised)	11.59	1.00

LAKE-LEVEL MEASUREMENTS OF SELECTED LAKES

SOUTH-CENTRAL ALASKA

Measurements of lake levels of selected lakes are given in the following table. Data are being collected at these lakes to define lake level changes from seasonal variations, the effects of man, response to droughts and response to changes in the ground-water system. Lake levels are referenced to an arbitrary gage datum and may not be at National Geodetic Vertical Datum.

Lake	Tributary to	Location	Surface area (acres)	Measured previously (water year)	Measurements	
					Date	Lake Level (ft)
		Kenai Peninsula Borough				
Shadura	Closed lake in Beaver Creek basin	Lat 60°42'17", long 151°00'12", in NE¼ sec.15, T.7 N., R.10 W., at north shore, 13 mi northeast of Kenai.	258	1970-71, 1976-78	10-19-78 5-21-79	15.74 16.62
Konovalof	Closed Lake in Beaver Creek basin	Lat 60°39'49', long 151°09'52", in SW¼ sec.26, T.7 N., R.11 W., at south shore of island near north shore of lake, 8.5 mi northeast of Kenai.	256	1970-71, 1976-78	10-19-78 5-21-79	16.28 16.87
Kidney	Closed lake	Lat 60°39'48", long 151°15'35", in SW¼ sec.29, T.7 N., R.11 W., at the eastern shore, 0.2 mi north of Lamplighter Holt Road, and 7.5 mi north of Kenai.	71	+1970-72, +1974-76, 1977-78	10-20-78 5-22-79	103.27 104.08
Cabin	Closed lake	Lat 60°40'30", long 151°19'15", in NE¼ sec.26, T.7 N., R.12 W., at the eastern shore, 0.2 mi west of Miller Loop Road, and 8.5 mi north of Kenai.	53	+1970-72, +1974-76, 1977-78	10-20-78 5-22-79	92.95 93.66
Island	Closed lake	Lat 60°42'19", long 151°19'05", in SE¼ sec.11, T.7 N., R.12 W., at the western shore, 0.1 mi east of Island Lake Road, and 10.7 mi north of Kenai.	272	+1970-72, +1974-76, 1977-78	10-19-78 5-21-79	98.56 99.02
Unnamed Lake	Closed lake	Lat 60°40'56", long 151°20'54", in SW¼ sec.23, T.7 N., R.12 W., at the southern shore, 0.4 mi north of Miller Loop Road, and 9.4 mi north of Kenai.	8.6	+1970-72, +1974-76, 1977-78	10-20-78 5-22-79	94.33 95.18
Douglas	Closed lake	Lat 60°40'27", long 151°13'20", in NW¼ sec.28, T.7 N., R.11 W., at the northern shore, 0.8 mi east of Lamplighter Holt Road, and 8.3 mi north of Kenai.	90	+1970-72, +1974-76, 1977-78	10-20-78 5-22-79	107.61 108.25
Wick	Closed lake	Lat 60°43'06", long 151°14'35", in NE¼ sec.8, T.7 N., R.11 W., at the northern shore, 0.2 mi south of Lamplighter Holt Road, and 11.4 mi north of Kenai.	173	+1970-72, +1974-76, 1977-78	10-19-78 5-21-79	106.20 106.95
Laura	Closed lake	Lat 60°43'44", long 151°13'15", in NW¼ sec.4, T.7 N., R.11 W., at the northwestern shore, 0.3 mi southeast of Halbouty Road, and 12.1 mi north of Kenai.	41	+1970-72, +1974-76, 1977-78	10-19-78 5-21-79	106.72 107.33
Daniels	Bishop Creek	Lat 60°44'25", long 151°10'27", in SW¼ sec.34, T.8 N., R.11 W., at northwest shore, 1.2 mi east of North Kenai Road, and 13 mi north of Kenai.	602	+1970-72, +1976, 1977-78	10-19-78 5-21-79	86.06 86.38
		Municipality of Anchorage				
Sand	Closed lake	Lat 61°09'03", long 149°58'25", in NW¼ sec.10, T.12 N., R.4 W., at western shore, 4.0 mi southwest of Spenard. (Station number 15274700.)	78	#1967-74, 1975-78	10-19-78 4-24-79 5-21-79 6-21-79 7-23-79 8-22-79 9-19-79	84.29 85.25 85.34 85.03 85.13 85.21 85.01
Little Campbell (formerly Campbell Point)	Closed lake	Lat 61°09'49", long 150°01'20", in NE¼ sec. 5, T.12 N., R.4 W., in Kincaid Park near Anchorage International Airport, at the northeast shore, 11.9 mi southwest of Spenard.	11	1975 1977-78	9-19-79	67.8
Conners	Closed lake	Lat 61°10'03", long 149°55'44", in SE¼ sec.35, T.13 N., R.4 W., near Anchorage International Airport; at southeast shore, 2.8 mi southwest of Spenard.	33	1973-75	9-19-79	74.7

+ Published at different datum. Converted to National Geodetic Vertical Datum.

# Operated as a daily stage station during open water with occasional readings during rest of year.

SOUTH-CENTRAL ALASKA

Lake	Tributary to	Location	Surface area (acres)	Measured Previously (water year)	Measurements	
					Date	Lake Level (ft)
		Municipality of Anchorage--Continued				
Jewel	Closed lake	Lat 61°08'23", long 149°57'41", in SE¼ sec.10, T.12 N., R.4 W., at public swimming area on northeast shore, 4.2 mi southwest of Spenard.	27	1974-75, 1977-78	9-19-79	90.8
Sundi	Closed lake	Lat 61°08'50", long 149°57'55", in NE¼ sec.10, T.12 N., R.4 W., at northeast shore, 3.9 mi southwest of Spenard.	8.8	1974-75, 1977-78	9-19-79	89.5
Delong	Closed lake	Lat 61°09'47", long 149°57'20", in NE¼ sec.3, T.12 N., R.4 W., near Anchorage International Airport; at southeast shore, 2.8 mi southwest of Spenard.	18	1973, 1977	9-28-78 9-19-79	73.7 74.1
Goose	Closed lake	Lat 61°11'48", long 149°49'06", in SE¼ sec.21, T.12 N., R.3 W., at the northern shore, and 2.9 mi southeast of Anchorage Post Office.	18	+1958-64, +1969-72, +1975, 1977-78	9-19-79	19.2
Lake Otis	Closed lake	Lat 61°11'27", long 149°50'18", in NE¼ sec.29, T.13 N., R.2 W., at the southeastern shore, and 2.6 mi southeast of Anchorage Post Office.	9.0	+1958-59, 1969-73, 1975, 1977-78	9-19-79	16.4
		Matanuska-Susitna Borough				
Big	Fish Creek	Lat 61°32'04", long 149°49'30", in SE¼ sec.28, T.17 N., R.3 W., head of Fish Creek at lake outlet, on left bank upstream from square notched weir upstream from bridge on Big Lake Road, and 13 mi southwest of Wasilla. (Station number 15287000.)	3,104	1972-78	6-29-79 8-03-79 9-07-79	10.32 10.36 10.00
Scotty	Ninemile Creek	Lat 62°19'05", long 150°19'20", head of Ninemile Creek, 0.1 mi north of Petersville Road, 0.3 mi south of outlet, and 7 mi west of Talkeetna. (Station number 15294030.)	224	1972-78	6-29-79 8-01-79 9-06-79	9.79 9.61 9.43

+ Published at different datum.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

Water-quality partial-record stations are particular sites where chemical-quality, biological and or sediment data are collected systematically over a period of years for use in hydrologic analyses. The data are collected usually less than quarterly.

SOUTHEAST ALASKA

#15086910 - NAVY LK OUTLET NR MEYERS CHUCK AK (LAT 56 04 04 LONG 132 25 30)

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
JUL				
26...	1030	32	13.0	14.0

#15086912 - NAVY C NR MEYERS CHUCK AK (LAT 56 03 42 LONG 132 26 58)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
JUL				
25...	1600	39	19.0	13.0

#15087108 - ZAREMBO C NR WRANGELL AK (LAT 56 20 13 LONG 132 58 45)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
MAY							
04...	0945	8.8	12	6.2	--	3.5	--
JUL							
22...	1100	15	23	--	15.0	10.5	9.9

#15087110 - ZAREMBO C NR POINT BAKER AK (LAT 56 20 17 LONG 132 59 47)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
MAY							
04...	1315	20	15	6.2	--	4.0	--
JUL							
22...	1330	30	101	--	12.0	10.0	9.8

STREAM-GAGING STATION FOR WHICH DISCHARGE WAS NOT PUBLISHED

SOUTH-CENTRAL ALASKA

†*15240000 - ANCHOR R AT ANCHOR POINT AK

WATER QUALITY DATA. WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW. INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS. NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM. DISSOLVED (MG/L AS MG)	SODIUM. DISSOLVED (MG/L AS NA)	POTASSIUM. DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)
MAR 12...	1915	104	100	.0	36	0	7.2	4.3	5.9	1.8	2.9
MAY 14...	1500	762	50	4.0	20	6	5.5	1.6	3.1	.9	4.4

DATE	CHLORIDE. DISSOLVED (MG/L AS CL)	FLUORIDE. DISSOLVED (MG/L AS F)	SILICA. DISSOLVED (MG/L AS SIO2)	SOLIDS. RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS. SUM OF CONSTITUENTS. DISSOLVED (MG/L)	NITROGEN. NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS. DISSOLVED (MG/L AS P)	IRON. TOTAL RECOVERABLE (UG/L AS FE)	IRON. SUSPENDED RECOVERABLE (UG/L AS FE)	IRON. DISSOLVED (UG/L AS FE)	MANGANESE. DISSOLVED (UG/L AS MN)
MAR 12...	4.0	.1	34	81	88	.42	.02	1000	620	380	80
MAY 14...	2.8	.1	19	50	47	.19	.02	1100	890	210	20

*15240300 - STARISKI C NR ANCHOR POINT AK

DATE	TIME	STREAMFLOW. INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS. NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM. DISSOLVED (MG/L AS MG)	SODIUM. DISSOLVED (MG/L AS NA)	POTASSIUM. DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)
MAR 12...	1545	24	100	.0	33	0	7.2	3.6	6.5	1.7	2.9
MAY 14...	1300	95	50	6.0	24	9	7.0	1.7	3.6	.9	4.8

DATE	CHLORIDE. DISSOLVED (MG/L AS CL)	FLUORIDE. DISSOLVED (MG/L AS F)	SILICA. DISSOLVED (MG/L AS SIO2)	SOLIDS. RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS. SUM OF CONSTITUENTS. DISSOLVED (MG/L)	NITROGEN. NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS. DISSOLVED (MG/L AS P)	IRON. TOTAL RECOVERABLE (UG/L AS FE)	IRON. SUSPENDED RECOVERABLE (UG/L AS FE)	IRON. DISSOLVED (UG/L AS FE)	MANGANESE. DISSOLVED (UG/L AS MN)
MAR 12...	4.5	.1	34	78	90	1.1	.03	1200	600	600	130
MAY 14...	3.2	.1	20	57	51	.14	.03	1600	1300	300	50

† DISCONTINUED GAGING STATION
* LOW-FLOW PARTIAL-RECORD STATION

*15241500 - DEEP C NR NINILCHIK AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)
MAR 12...	1410	111	90	.0	32	0	6.5	3.9	4.4	1.4	2.5
MAY 14...	1150	834	35	3.5	19	3	5.2	1.5	2.1	.6	4.4

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
MAR 12...	1.9	.1	32	72	77	.15	.02	780	470	310	60
MAY 14...	1.5	.1	13	40	38	.01	.02	2000	1800	190	20

*15242100 - CROOKED C NR KASILOF AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)
MAR 12...	1215	30	105	.0	42	0	8.6	5.0	4.4	2.1	3.6
MAY 14...	1000	81	75	6.0	34	7	7.9	3.5	3.2	1.6	5.2

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
MAR 12...	1.8	.1	36	88	89	.12	.02	900	310	590	120
MAY 14...	1.7	.1	24	71	65	.15	.03	1500	1100	360	80

†15266500 - BEAVER C NR KENAI AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
NOV 03...	1600	22	112	6.9	.0	13.8	95	755	61	0

† DISCONTINUED GAGING STATION
* LOW-FLOW PARTIAL-RECORD STATION

SOUTH-CENTRAL ALASKA--Continued

15290100 - L SUSITNA R NR HOUSTON AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
OCT 05...	1850	150	110	6.8	5.0	12.6	K2	<1	K2	42	1

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT 05...	13	2.4	4.0	.6	51	0	2.6	5.5	.0	7.5	60

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
OCT 05...	62	.22	.25	.00	.05	.23	.14	.23	.19	.45	.00

DATE	PHOSPHORUS, DISSOLVED (MG/L AS P)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT 05...	.00	150	1	0	0	0	3	390	90	1	10

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT 05...	0	.0	1	0	0	0	1.6	.4	2	.81

*15290200 - NANCY LK TR NR WILLOW AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT 17...	1500	7.6	90	6.6	3.0	12.2	59	44	36	8	10

K NON-IDEAL COLONY COUNT
* LOW-FLOW PARTIAL-RECORD STATION

SOUTH-CENTRAL ALASKA--Continued

15290200 - NANCY LK TR NR WILLOW AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
OCT 17...	2.2	4.8	.5	32	0	4.1	6.6	.1	9.4	73	54

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
OCT 17...	.06	.08	.01	.01	.41	.35	.42	.36	.48	.01

DATE	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	LENGTH OF EXPOSURE (DAYS)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	CHLOR-A PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	CHLOR-B PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)
OCT 17...	.01	310	40	11	.6	57	.720	1.60	.599	.149

*15294002 - WILLOW C AT HATCHER PASS ROAD NR WILLOW AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
OCT 05...	1500	72	110	6.8	5.0	12.4	<1	K2	<1	35	3

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT 05...	10	2.4	7.7	.8	39	0	4.1	13	.0	6.2	61

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
OCT 05...	64	.04	.06	.00	.01	.49	.30	.49	.31	.53	.00

K NON-IDEAL COLONY COUNT
* LOW-FLOW PARTIAL-RECORD STATION

SOUTH-CENTRAL ALASKA--Continued

15294002 - WILLOW C AT HATCHER PASS ROAD NR WILLOW AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	PHOSPHORUS, DISSOLVED (MG/L AS P)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT 05...	.00	50	3	0	0	0	3	110	110	1	0

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT 05...	40	.0	1	0	0	0	1.0	.5	1	.19

*15294007 - DECEPTION C AB TR NR HOUSTON AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
OCT 05...	0940	16	120	6.9	--	3.5	13.0	K36	K22	K2	34	3
JUL 24...	1345	31	89	7.4	16.5	12.0	10.3	--	--	K4	25	2

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
OCT 05...	10	2.1	12	1.1	37	0	2.3	22	.0	11	81	79
JUL 24...	7.5	1.4	7.0	.7	28	0	6.2	8.6	.0	9.9	63	56

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)
OCT 05...	.04	.05	.00	.00	.20	.20	.20	.20	.24	.01	.00	60
JUL 24...	.37	.10	.01	--	.20	--	.21	--	.58	.00	.01	--

DATE	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)
OCT 05...	1	0	0	0	9	250	--	190	0	0	--
JUL 24...	0	0	0	10	28	290	120	170	14	10	5

K NON-IDEAL COLONY COUNT
* LOW-FLOW PARTIAL-RECORD STATION

SOUTH-CENTRAL ALASKA--Continued

15294007 - DECEPTION C AB TR NR HOUSTON AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT 05...	0	.0	3	0	0	0	4.2	.3	--	3	.13
JUL 24...	5	.1	--	0	0	30	--	--	.00	3	.25

*15294008 - DECEPTION C TR NR HOUSTON AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
OCT 05...	1115	8.9	150	6.6	--	3.0	13.1	K22	K28	K4	37	3
JUL 24...	1430	16	90	6.7	15.0	11.0	--	--	K76	K8	28	3

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
OCT 05...	11	2.2	14	1.1	41	0	2.0	24	.0	11	92	86
JUL 24...	8.4	1.6	8.0	.2	30	0	4.9	9.1	.0	11	67	59

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)
OCT 05...	.10	.15	.00	.01	.29	.56	.29	.57	.39	.00	.00	60
JUL 24...	.26	.22	.01	--	.04	--	.05	--	.31	.01	.01	--

DATE	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)
OCT 05...	1	0	0	0	3	300	--	230	1	50	--
JUL 24...	0	0	0	10	3	360	120	240	11	40	10

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT 05...	40	.0	1	0	0	10	6.1	.7	--	3	.07
JUL 24...	30	.0	--	0	0	20	--	--	.00	7	.38

K NON-IDEAL COLONY COUNT
* LOW-FLOW PARTIAL-RECORD STATION

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SOUTH-CENTRAL ALASKA--Continued

*15294012 - WILLOW C AT PARKS HWY NR WILLOW AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
JUL 24...	1858	1040	54	6.4	15.0	11.5	53	K16	20	4

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
JUL 24...	6.1	1.1	2.8	.4	19	0	1.9	4.0	.0	6.9

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
JUL 24...	38	33	.11	.13	.01	.12	.13	.24	.01	.01

DATE	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
JUL 24...	2	0	1	0	62	260	160	100	14	20

DATE	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
JUL 24...	0	30	.1	0	0	60	.00	6	17

611946151372600 - CAPPS C NR TYONEK AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 16...	1300	31	16	1.3

K NON-IDEAL COLONY COUNT

* LOW-FLOW PARTIAL-RECORD STATION

611823151302700 - BISHOP C NR TYONEK AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT				
16...	1350	24	4	.26

611152151392000 - CHUITNA R BL WOLVERINE F NR TYONEK AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT				
16...	1145	55	2	.30

610916151301100 - CHUITNA R AB CHUIT C NR TYONEK AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT				
16...	1010	81	3	.66

611244151335400 - CHUIT C 5.4 MI AB MOUTH NR TYONEK AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT				
16...	1105	23	1	.06

610918151301100 - CHUIT C AT MOUTH NR TYONEK AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT				
16...	0930	45	2	.24

YUKON ALASKA

†15514500 WOOD R NR FAIRBANKS AK (LAT 64 36 06 LONG 148 12 45)

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT				
18...	1000	280	300	.0
DEC				
19...	1050	84	230	.0

†15534900 - POKER C NR CHATANIKA AK (LAT 65 09 32 LONG 147 28 49)

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT				
18...	1200	8.0	120	.0

† DISCONTINUED GAGING STATION

ARCTIC SLOPE ALASKA

15880000 - COLVILLE RIVER NEAR NUIQSUT
(National stream-quality accounting network seasonal station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
JUN 07...	1501	300	2.0	80	7.0	9.6	--
07...	1502	500	2.0	80	7.0	9.3	--
07...	1503	700	2.0	80	7.2	9.3	--
07...	1504	900	2.0	75	7.1	9.2	--
07...	1505	1100	2.0	80	7.2	9.2	10.6
07...	1506	1100	20	--	--	--	10.3
07...	1507	1300	2.0	80	7.3	9.3	--
07...	1508	1500	2.0	80	7.4	9.3	--
07...	1509	1700	2.0	85	7.4	9.2	--
07...	1510	1900	2.0	90	7.5	9.0	--
AUG 20...	1411	320	2.0	170	--	15.0	--
20...	1412	620	2.0	170	--	14.5	--
20...	1413	870	2.0	170	--	14.5	--
20...	1414	1120	2.0	170	--	15.0	--
20...	1415	1370	2.0	180	--	15.0	--
SEP 11...	1611	470	2.0	170	--	6.0	--
11...	1612	720	2.0	170	--	6.0	--
11...	1613	920	2.0	170	--	6.0	--
11...	1614	1120	2.0	175	--	6.0	--
11...	1615	1320	2.0	190	--	6.0	--

DATE	TIME	STREAM WIDTH (FT)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
JUN 07...	1500	2000	40000	80	7.2	9.0	3.1	10.6	K8	K1	36	3
AUG 20...	1400	1520	34900	170	7.2	15.0	1.2	9.4	K11	K6	76	19
SEP 11...	1600	1470	28600	170	7.0	6.0	6.9	11.3	K7	K0	88	37

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
JUN 07...	10	2.6	1.9	.7	40	9.0	1.1	.1	1.3	55	47	.03
AUG 20...	21	5.8	3.1	.6	70	30	.6	.1	3.4	107	99	.07
SEP 11...	24	6.9	3.5	.7	63	38	1.1	.1	3.7	120	109	.13

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)
JUN 07...	--	.01	.46	.47	.09	.38	.50	--	.02	.03	1	0
AUG 20...	--	.01	1.6	1.6	.73	.87	1.7	--	.00	.00	1	0
SEP 11...	.04	.05	.57	.62	.02	.60	.75	.64	.02	.00	--	--

K NON-IDEAL COLONY COUNT

ARCTIC SLOPE ALASKA--Continued

15880000 - COLVILLE RIVER NEAR NUIQSUT
(National stream-quality accounting network seasonal station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)
JUN 07...	100	100	0	2	0	2	0	0	0	0	0	0
AUG 20...	0	0	90	1	0	4	0	0	10	0	0	<3
SEP 11...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)
JUN 07...	15	11	4	2600	2400	200	24	16	8	60	60
AUG 20...	4	0	4	1300	1100	240	11	6	5	20	10
SEP 11...	--	--	--	--	--	--	--	--	--	--	--

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
JUN 07...	0	.1	.0	.1	0	0	0	0	0	0	30
AUG 20...	6	.1	.1	.0	0	0	0	0	0	0	10
SEP 11...	--	--	--	--	--	--	--	--	--	--	--

DATE	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	CHLOR-A PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	CHLOR-B PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	BIOMASS CHLOROPHYLL RATIO PERIPHYTON (UNITS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
JUN 07...	20	10	9.0	.8	--	--	--	--	--	76	8210
AUG 20...	3	7	--	.7	--	--	--	--	--	31	2920
SEP 11...	--	--	--	--	2.05	2.20	.160	.000	938	15	1160

ARCTIC SLOPE ALASKA--Continued

15880000 - COLVILLE RIVER NEAR NUIQSUT
(National stream-quality accounting network seasonal station)

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO SEPTEMBER 1979

DATE	JUN 7,79	AUG 20,79	SEP 11,79
TIME	1500	1400	1600
TOTAL CELLS/ML	0	110	190
DIVERSITY: DIVISION	0.0	1.5	0.0
.CLASS	0.0	1.5	0.0
..ORDER	0.0	1.5	0.3
...FAMILY	0.0	2.4	2.6
....GENUS	0.0	2.4	2.9

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...OOCYSTACEAE						
....ANKISTRODESMUS	--	-	20#	19	--	-
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	--	-	--	-	10	5
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	--	-	--	-	15	8
....RHOICOSPHENIA	--	-	--	-	5	3
...CYMBELLACEAE						
....CYMBELLA	--	-	5	5	10	5
...FRAGILARIACEAE						
....HANNAEA	--	-	--	-	5	3
....SYNEDRA	--	-	20#	19	65#	35
...GOMPHONEMATACEAE						
....GOMPHONEMA	--	-	--	-	15	8
...NAVICULACEAE						
....NAVICULA	--	-	20#	19	15	8
...NITZSCHIACEAE						
....NITZSCHIA	--	-	10	10	15	8
...TABELLARIACEAE						
....TABELLARIA	--	-	--	-	30#	16
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..HORMOGONALES						
...OSCILLATORIACEAE						
....SCHIZOTHRIX	--	-	30#	29	--	-

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

Samples are collected at sites other than gaging stations and partial-record stations to give better areal coverage in a river basin. Such sites are referred to as miscellaneous sites.

SOUTHEAST ALASKA

580502134371400 - GREENS C AB BIG SORE C NR JUNEAU AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
AUG 16...	1530	129	7.8	11.0	10.1	59	19	20	2.3	1.7

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)
AUG 16...	.2	49	18	.6	.0	4.5	72	.02	30

DATE	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
AUG 16...	1	0	0	10	1	20	0	50	0

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)
AUG 16...	10	0	20	.2	0	1	0	0	0

580500134371900 - BIG SORE C NR JUNEAU AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
AUG 16...	1430	3.2	160	7.3	11.0	10.2	85	29	24	6.1

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)
AUG 16...	1.6	.2	68	28	1.2	.0	5.5	100	20

SOUTHEAST ALASKA--Continued

580500134371900 - BIG SORE C NR JUNEAU AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
AUG									
16...	0	0	0	10	1	40	0	0	10

DATE	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
AUG									
16...	4	6	.2	0	1	0	0	0	.00

580447134375600 - WEST MINE DRAINAGE C ABOVE TR NR JUNEAU AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
JUL										
16...	1030	.03	520	8.0	7.5	--	160	92	29	21
AUG										
16...	0930	.01	450	7.8	9.5	9.6	140	85	30	16

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	ALUMINUM, DISSOLVED (UG/L AS AL)
JUL										
16...	33	5.2	81	96	8.1	.1	5.9	340	23	--
AUG										
16...	26	2.5	68	65	6.9	.1	6.7	253	15	40

DATE	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
JUL										
16...	1	100	0	0	13	290	270	20	33	180
AUG										
16...	1	0	0	10	1	--	--	--	3	10

DATE	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
JUL									
16...	30	150	.1	--	1	0	30	--	--
AUG									
16...	0	10	.5	3	2	0	0	1	.00

580455134380500 - WEST MINE DRAINAGE C NR JUNEAU AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
JUL 16...	1200	.57	162	7.5	5.0	--	63	27	17	5.1
AUG 16...	1145	.39	158	7.9	7.0	10.2	63	24	17	5.0

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)
JUL 16...	5.1	.6	44	33	6.5	.1	8.0	106	2.0	--
AUG 16...	3.4	.3	48	30	1.6	.1	8.7	92	.52	0

DATE	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
JUL 16...	1	0	0	0	6	70	60	10	10	20
AUG 16...	0	0	0	0	1	50	30	20	0	10

DATE	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
JUL 16...	20	3	.1	--	2	0	10	--	--
AUG 16...	6	4	.2	0	3	0	0	1	.00

580444134383700 - GREENS C BL WEST MINE DRAINAGE C NR JUNEAU AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
AUG 16...	1045	38	145	8.0	10.5	10.0	67	19	21	3.5

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)
AUG 16...	1.9	.2	58	19	.7	.1	4.9	81	.14	20

580444134383700 - GREENS C BL WEST MINE DRAINAGE C NR JUNEAU AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
AUG 16...	1	0	0	10	1	40	0	1	0

DATE	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
AUG 16...	0	2	.3	1	1	0	0	0	.00

580500134373300 - EAST MINE DRAINAGE C NR JUNEAU AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
AUG 16...	1345	.43	250	8.1	10.0	10.2	97	44	24	8.9

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	ALUMINUM, DISSOLVED (UG/L AS AL)
AUG 16...	10	1.7	64	52	1.5	.1	9.4	149	2.1	60

DATE	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
AUG 16...	1	100	1	10	1	540	350	190	2	50

DATE	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
AUG 16...	20	30	.2	1	2	0	10	3	.00

602938149502600 - BEAN C AT BEAN C BRIDGE NR COOPER LANDING AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
MAY 01...	1235	15	190	1.0

602930149495800 - BEAN C AT MOUTH NR COOPER LANDING AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
MAR 25...	1300	.10	360	.0

623742150462600 - RAMSDYKE C NR PETERSVILLE AK

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)
JUN 20...	1500	46	22	3	5.6	2.0	1.3	.0	24	0

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
JUN 20...	3.7	.4	.1	6.8	27	31	.00	.02	20	<1

623545150435600 - LONG C NR PETERSVILLE AK

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)
JUN 19...	1500	33	14	0	4.4	.7	1.5	.1	17	0

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
JUN 19...	3.4	.4	.1	6.1	21	25	.00	.01	40	8

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTH-CENTRAL ALASKA--Continued

614906149385000 - PETERS C BL PURCHES C NR WILLOW AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
JUL 24...	1230	465	33	6.7	15.0	8.0	11.5	<1	13	2

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
JUL 24...	4.6	.4	1.0	.4	13	0	4.3	.8	.0	5.2

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
JUL 24...	19	23	.05	.05	.01	.27	.28	.33	.00	.00

DATE	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
JUL 24...	0	0	1	10	3	50	40	10	29	0

DATE	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
JUL 24...	0	1	.1	0	0	20	.00	4	5.0

614446149551000 - UNNAMED TRIB TO DECEPTION C NR WILLOW AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
JUL 24...	1550	12	76	6.7	16.0	13.0	94	27	2	8.0	1.7	4.9

SOUTH-CENTRAL ALASKA--Continued

614446149551000 - UNNAMED TRIB TO DECEPTION C NR WILLOW AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
JUL 24...	.5	30	0	7.3	5.3	.0	11	70	54	.05	.06	.03

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)
JUL 24...	.34	.37	.42	.02	.02	1	0	1	10	17	690	300

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
JUL 24...	390	9	30	10	20	.0	0	0	0	.00	10	.32

614251149585100 - LILLY C AB HOWLING DOG FARM NR WILLOW AK

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
OCT 17...	1100	60	2.0	12.4	139	83	71	28	6	8.3	1.8

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
OCT 17...	1.8	.3	27	0	4.2	1.9	.1	9.0	56	41

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
OCT 17...	.07	.07	.02	.01	.53	.43	.55	.44	.62	.01

SOUTH-CENTRAL ALASKA--Continued

614251149585100 - LILLY C AB HOWLING DOG FARM NR WILLOW AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	LENGTH OF EXPOSURE (DAYS)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	CHLOR-A PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	CHLOR-B PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)
OCT										
17...	.01	390	40	11	.3	56	.920	1.66	.947	.278

614215150001400 - LILLY C AT NANCY LK NR WILLOW AK--Continued

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT											
17...	1300	65	6.0	3.0	12.4	737	60	K24	21	0	5.3

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
OCT											
17...	1.9	2.5	.5	28	0	5.2	2.1	.1	8.7	56	41

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
OCT										
17...	.07	.08	.02	.02	.39	.39	.41	.41	.48	.01

DATE	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	LENGTH OF EXPOSURE (DAYS)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	CHLOR-A PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	CHLOR-B PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)
OCT										
17...	.01	420	40	10	.7	56	.690	1.67	.518	.209

K NON-IDEAL COLONY COUNT

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTH-CENTRAL ALASKA--Continued

614026149592400 - LAKE C AT NANCY LK OUTLET NR WILLOW AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
OCT 17...	0900	120	7.4	4.5	10.9	736	49	K6	43	3

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
OCT 17...	13	2.5	7.9	.7	48	0	2.3	14	.1	5.2

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)
OCT 17...	74	69	.00	.01	.01	.01	.34	.36	.35	.37

DATE	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L)
OCT 17...	.35	.00	.00	40	0	6.5	.7	.977	.105

K NON-IDEAL COLONY COUNT

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

YUKON ALASKA

635500144535500 - TANANA R 18 MI AB GERSTLE R NR DELTA JUNCTION AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)
OCT 15...	1430	290	8.0	.0	140	14	43	9.1	5.5	1.4	160
JUN 20...	1300	218	7.8	12.0	93	18	27	6.3	5.7	1.4	92

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
OCT 15...	32	2.2	.1	12	181	186	.34	.01	10	6
JUN 20...	25	3.3	.1	7.8	117	122	.04	.00	30	2

15476700 - GERSTLE R NR BIG DELTA AK (LAT 63 49 00 LONG 144 55 00)

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)
OCT 15...	1740	335	8.0	.0	180	77	52	11	3.7	2.3	120
JUN 20...	1400	205	7.8	10.0	93	34	26	6.8	1.7	1.5	72

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
OCT 15...	78	1.8	.6	3.5	208	214	.54	.00	<10	2
JUN 20...	39	.9	.3	2.2	113	114	.04	.00	30	20

635355145134500 - SAWMILL C NR BIG DELTA AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
JUN 20...	1445	5.2	35	6.4	13.0	14	0

YUKON ALASKA--Continued

640125145432500 - JARVIS C NR DELTA JCT AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)
OCT 16...	1210	362	8.2	.0	180	62	46	17	3.5	1.5	150
JUN 20...	1130	182	7.8	11.0	84	26	21	7.6	1.5	.9	70

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
OCT 16...	69	.6	.1	4.9	212	218	.23	.02	<10	7
JUN 20...	30	1.5	.1	3.3	102	101	.09	.00	100	8

640735145500000 - DELTA R NR BIG DELTA AK (LAT 64 07 35 LONG 145 50 00)

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)
OCT 16...	1530	255	8.2	4.0	120	28	35	7.6	3.0	3.7	110
JUN 20...	1805	186	7.0	13.0	81	19	22	6.4	2.4	2.0	76

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
OCT 16...	45	1.0	.1	5.6	148	156	.28	.00	<10	2
JUN 20...	27	1.2	.1	4.3	103	103	.11	.00	40	4

154780000 - TANANA R AT BIG DELTA AK (LAT 64 09 20 LONG 145 51 00)

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)
OCT 16...	1630	277	7.9	.0	130	27	37	8.1	4.1	2.3	125
JUN 20...	1745	218	7.4	13.0	97	16	28	6.5	5.1	1.7	98

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
OCT 16...	32	1.4	.1	10	154	158	.21	.00	<10	9
JUN 20...	29	2.7	.1	8.8	124	131	.15	.00	170	6

YUKON ALASKA--Continued

644322147192900 - TANANA R NR N POLE AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM
OCT									
05...	1200	14400	1.5	160	6220	--	--	--	--
JUN									
19...	1400	32800	--	817	72400	--	16	22	29
JUL									
13...	1200	52700	16.5	2060	293000	--	26	36	48
23...	1200	69100	14.0	3450	644000	--	18	27	40
31...	1130	71000	--	2690	516000	--	26	34	46
AUG									
09...	1300	68200	14.5	2380	438000	--	19	27	37
30...	1100	49700	9.0	1550	208000	23	31	41	52
SEP									
07...	1100	34200	--	596	55000	12	15	22	29
13...	1200	30700	--	556	46100	9	11	16	22

DATE	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
OCT									
05...	--	--	--	--	--	31	41	83	100
JUN									
19...	37	46	63	97	100	--	--	--	--
JUL									
13...	61	72	89	99	100	--	--	--	--
23...	55	72	90	99	100	--	--	--	--
31...	58	72	89	98	100	--	--	--	--
AUG									
09...	49	64	84	98	100	--	--	--	--
30...	61	--	--	--	--	69	80	97	100
SEP									
07...	40	--	--	--	--	48	61	92	100
13...	28	--	--	--	--	36	49	85	100

NORTHWEST ALASKA

664839162325100 - SADIE C NR KOTZEBUE AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
AUG				
22...	1400	62	2500	13.0

670329154184900 - WALKER LK OUTLET NR KOBUK AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)
AUG												
11...	0732	1160	130	7.9	14.5	68	8	23	2.5	.6	1.1	73

DATE	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
AUG											
11...	0	11	.2	.1	2.0	70	82	1.2	.00	<10	<1

665006154390000 - KOBUK R AB LOWER KOBUK CANYON NR KOBUK AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)
AUG												
13...	0920	2380	160	7.9	14.0	77	9	26	2.9	.7	.9	83

DATE	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
AUG											
13...	0	14	.3	.1	2.1	82	<89	.22	.00	80	6

664925154573100 - REED R NR MOUTH NR KOBUK AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)
AUG												
15...	0945	1640	110	7.2	9.5	50	12	17	1.9	.9	.7	47

NORTHWEST ALASKA--Continued

664925154573100 - REED R NR MOUTH NR KOBUK AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
AUG 15...	0	13	.1	.2	2.7	55	61	.31	.00	50	6

664430156034800 - PAH R NR MOUTH NR KOBUK AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)
AUG 17...	1406	458	80	7.1	13.5	39	4	11	2.9	2.1	.2	43

DATE	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
AUG 17...	0	6.4	.5	.1	6.1	51	51	.02	.02	650	20

665642156450600 - KOGOLUKTUK R NR MOUTH NR KOBUK AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
AUG 19...	1137	2540	180	7.3	9.0	11.8	89	25	29	4.0	.9	1.0

DATE	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
AUG 19...	78	0	26	.3	.1	2.9	104	103	.13	.00	90	10

665412156530600 - KOBUK R AB KOBUK AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
AUG 24...	1546	21900	165	7.3	12.0	11.0	83	24	27	3.7	.8	.7

NORTHWEST ALASKA--Continued

665412156530600 - KOBUK R AB KOBUK AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
AUG 24...	72	0	23	.2	.1	3.4	95	<95	.13	.01	100	9

670436156561200 - RUBY C AT BORNITE NR KOBUK AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
AUG 21...	1824	80	235	7.5	6.5	11.6	120	11	37	6.2	.5	.0

DATE	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
AUG 21...	130	0	17	.4	.1	3.0	130	129	.07	.00	40	7

670635158145100 - KOBUK R BL JADE C NR AMBLER AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
AUG 28...	1023	50000	145	7.7	9.0	11.6	91	18	29	4.5	.5	.3

DATE	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
AUG 28...	89	0	15	.3	.1	2.5	86	<97	.12	.01	100	7

670724159013000 - KAVET C AT MOUTH NR KIANA AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
AUG 29...	1149	55	220	7.8	8.0	11.3	120	5	40	4.8	1.6	.3

NORTHWEST ALASKA--Continued

670724159013000 - KAVET C AT MOUTH NR KIANA AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
AUG 29...	140	0	4.5	.5	.1	6.4	128	<132	.56	.02	1800	50

671512159385800 - SALMON R AB KITLIK R NR KIANA AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
AUG 23...	1023	4400	185	7.5	7.5	11.8	110	46	33	7.6	.7	.1

DATE	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
AUG 23...	83	0	51	.3	.1	2.7	136	138	.52	.00	20	20

671430159400600 - KITLIK R NR KIANA AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
AUG 23...	1259	851	55	6.5	7.5	11.6	24	9	7.4	1.4	.5	.0

DATE	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
AUG 23...	19	0	11	.1	.1	2.6	29	33	.05	.00	50	8

665817160251100 - KOBUK R AT KIANA AK

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)
AUG 30...	1444	230	7.5	9.0	11.1	120	22	35	7.9	.6	.1	120

DATE	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
AUG 30...	0	23	.6	.1	2.2	130	129	.09	.00	130	8

SOUTH-CENTRAL ALASKA

614147149520100 - UNNAMED LK 2 HEAD OF LILY C NR WILLOW AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	BAROMETRIC PRESSURE (MM OF HG)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
OCT												
05...	1230	.5	50	5.8	6.0	10.4	724	23	1	7.0	1.4	1.7

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
OCT												
05...	.2	27	0	2.3	.8	.0	4.1	35	31	.02	190	0

614204149513300 - UNNAMED LK 1 NR DECEPTION C NR WILLOW AK

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	BAROMETRIC PRESSURE (MM OF HG)	HARDNESS (MG/L AS CACO3)
OCT								
05...	1200	.5	14	4.9	6.5	10.4	719	4

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT									
05...	2	1.0	.3	.5	.2	<2	0	1.5	.6

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
OCT								
05...	.0	.3	15	6	.01	.01	90	0

614128149515300 - UNNAMED LK 3 S OF DECEPTION C NR WILLOW AK

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	BAROMETRIC PRESSURE (MM OF HG)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
OCT												
05...	1315	.5	13	4.9	7.0	8.6	724	5	5	1.0	.7	.9

614128149515300 - UNNAMED LK 3 S OF DECEPTION C NR WILLOW AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
OCT												
05...	.3	<1	0	3.0	1.1	.0	2.5	24	10	.01	280	0

614101149583700 - NANCY LK EAST ARM NR WILLOW AK

DATE	TIME	SAMPLING DEPTH (FT)	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)
OCT											
16...	1159	1.0	--	132	7.2	6.2	--	9.0	--	--	--
16...	1200	5.0	33.0	130	7.2	6.3	4.3	9.2	752	40	K4
16...	1205	20	--	135	7.5	6.2	--	8.6	--	--	--
16...	1207	30	--	135	7.5	6.2	--	8.5	--	--	--
16...	1208	33	--	135	7.5	6.2	--	8.2	--	--	--

DATE	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT											
16...	--	--	--	--	--	--	--	--	--	--	--
16...	K34	42	0	13	2.4	8.8	.7	52	0	3.0	14
16...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)
OCT											
16...	--	--	--	--	--	--	--	--	--	--	--
16...	.1	6.0	77	74	.01	.01	.01	.01	.43	.47	.44
16...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--

DATE	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L)
OCT										
16...	--	--	--	--	--	--	--	--	--	--
16...	.48	.45	.00	.00	30	20	6.6	.4	.863	.070
16...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--

K NON-IDEAL COLONY COUNT

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

614113150001400 - NANCY LK CENTRAL BASIN NR WILLOW AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMPLING DEPTH (FT)	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
16...	1600	--	33.0	120	7.4	6.5	4.0	9.0	K25	<1	<1
16...	1601	1.0	--	122	7.4	6.5	--	9.1	--	--	--
16...	1602	10	--	122	7.4	6.5	--	8.9	--	--	--
16...	1603	20	--	121	7.4	6.5	--	9.0	--	--	--
16...	1605	33	--	121	7.4	6.5	--	9.1	--	--	--

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT										
16...	42	3	13	2.3	6.8	.8	48	0	2.2	11
16...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)
OCT										
16...	.1	5.6	74	66	.00	.03	.01	.01	.33	1.5
16...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L)
OCT										
16...	.34	1.5	.34	.00	.00	50	0	6.4	.007	.096
16...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--

K NON-IDEAL COLONY COUNT

SOUTH-CENTRAL ALASKA--Continued

614213150003600 - NANCY LK NORTH ARM NR WILLOW AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMPLING DEPTH (FT)	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
16...	1500	1.0	33.0	110	7.3	6.2	3.9	8.5	48	K1	<1
16...	1501	5.0	--	110	7.3	6.2	--	8.5	--	--	--
16...	1502	25	--	110	7.4	6.1	--	8.4	--	--	--
16...	1503	33	--	112	7.3	5.8	--	6.8	--	--	--

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT											
16...	44	0	14	2.3	4.2	.7	64	0	2.5	5.8	.1
16...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)
OCT										
16...	6.5	70	68	.01	.01	.03	.01	.31	.33	.34
16...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--

DATE	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L)
OCT										
16...	.34	.35	.01	.01	60	40	5.8	.4	1.43	.105
16...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--

K NON-IDEAL COLONY COUNT

YUKON ALASKA

640510145360000 - CLEARWATER LK NR BIG DELTA

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)
OCT 16...	1500	289	7.8	2.0	130	34	38	9.1	2.5	2.5	120
JUN 20...	1706	271	7.7	12.0	130	36	38	9.7	2.9	2.6	120

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
OCT 16...	41	1.2	.1	8.5	159	163	.27	.00	<10	2
JUN 20...	42	1.4	.1	9.2	164	166	.25	.00	10	<1

690516154390600 - UNNAMED LK W OF KAKVUIYAT BEND NR UMIAT AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
JUN												
18...	2200	65	6.1	14.5	10.8	107	0	0	--	--	--	1.7
29...	1400	68	7.2	12.5	10.6	101	29	0	6.1	3.4	.6	1.2
JUL												
13...	1000	63	7.6	15.0	10.2	102	32	0	6.6	3.7	.5	1.1
27...	1500	68	7.8	17.5	9.5	100	31	0	6.6	3.6	.6	1.2
AUG												
12...	1000	69	7.9	16.5	10.0	103	34	0	7.0	3.9	.6	1.2
24...	0900	63	6.9	13.5	9.8	95	32	0	6.7	3.7	.6	1.0
SEP												
10...	1830	67	6.7	8.0	11.9	102	36	3	7.5	4.2	.7	1.0

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)
JUN											
18...	36	0	2.8	.7	.0	--	20	.00	.00	.00	.00
29...	41	0	3.1	.7	.0	.4	36	.00	--	.00	--
JUL											
13...	39	0	3.4	.4	.1	.3	36	.00	.00	.01	.01
27...	43	0	.8	.5	.1	.2	35	.00	.00	.00	.00
AUG											
12...	47	0	2.6	.3	.1	.4	39	.00	.00	.00	.00
24...	42	0	3.3	.2	.1	.6	37	.00	.00	.00	.00
SEP											
10...	40	0	2.3	.1	.1	.6	36	.00	.00	.00	.00

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)
JUN											
18...	.00	.01	.04	.00	.12	.17	.16	.00	.17	.16	.17
29...	.00	.00	.03	--	.35	--	.38	--	--	.39	--
JUL											
13...	.01	.01	.03	.02	.39	.30	.42	.12	.30	.43	.31
27...	.00	.00	.05	.01	.48	.47	.53	.05	.48	.53	.48
AUG											
12...	.00	.00	.02	.00	.43	.45	.45	.00	.45	.45	.45
24...	.00	.00	.02	.00	.97	.67	.99	.32	.67	1.0	.67
SEP											
10...	.00	.00	.02	.01	.75	.65	.77	.11	.66	.77	.66

DATE	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
JUN											
18...	.01	.00	.01	.00	--	--	--	--	--	--	--
29...	.01	--	.00	--	3	2	1	1	0	<1	10
JUL											
13...	.00	.00	.01	.00	--	--	--	--	--	--	--
27...	.01	.00	.00	.00	--	--	--	--	--	--	--
AUG											
12...	.01	.00	.00	.00	--	--	--	--	--	--	--
24...	.02	.00	.00	.00	2	2	0	1	0	<1	10
SEP											
10...	.02	.01	.00	.00	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

ARCTIC-SLOPE ALASKA--Continued

690516154390600 - UNNAMED LK W OF KAKVUIYAT BEND NR UMIAT AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)
JUN											
18...	--	--	--	--	--	1000	--	--	--	--	--
29...	0	10	17	17	0	250	120	130	22	22	0
JUL											
13...	--	--	--	--	--	200	90	110	--	--	--
27...	--	--	--	--	--	250	0	300	--	--	--
AUG											
12...	--	--	--	--	--	370	260	110	--	--	--
24...	0	10	1	0	1	310	210	100	1	1	0
SEP											
10...	--	--	--	--	--	240	180	60	--	--	--

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
JUN											
18...	--	--	--	--	--	--	--	--	--	--	7.8
29...	5	.1	.1	.0	0	0	0	20	20	<3	8.6
JUL											
13...	5	--	--	--	--	--	--	--	--	--	5.2
27...	30	--	--	--	--	--	--	--	--	--	6.2
AUG											
12...	1	--	--	--	--	--	--	--	--	--	7.3
24...	1	.0	.0	.0	0	0	0	0	0	20	7.2
SEP											
10...	2	--	--	--	--	--	--	--	--	--	9.3

DATE	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	SESTON, TOTAL (MG/L)	SESTON ASH WEIGHT (MG/L)	CHLOR-A PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	CHLOR-B PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	BIOMASS CHLOROPHYLL RATIO PERIPHYTON (UNITS)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L)	BIOMASS CHLOROPHYLL RATIO PLANKTON (UNITS)
JUN											
18...	.6	--	--	--	--	--	--	--	--	--	--
29...	.3	--	--	93	92	--	--	--	.543	.048	2026
JUL											
13...	.3	.160	.350	--	--	.007	.000	27140	.475	.048	--
27...	.3	.160	.680	112	110	.028	.000	18570	.283	.042	7067
AUG											
12...	.4	.050	.270	100	99	.011	.003	20000	.305	.059	2623
24...	.9	.300	.490	103	100	.025	.008	7600	.439	.033	4556
SEP											
10...	--	.110	.370	99	97	.011	.000	23640	1.11	.107	1712

690530154390600 - UNNAMED LK NW OF KAKVUIYAT BEND NR UMIAT AK

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
JUN												
18...	2100	63	6.2	14.0	10.6	104	30	10	6.1	3.5	.6	1.0
29...	1100	67	7.4	11.0	10.8	99	30	0	6.2	3.6	.5	.9
JUL												
13...	1230	74	7.7	15.5	10.2	103	35	1	7.2	4.1	.8	1.1
27...	1200	70	7.6	16.5	9.0	93	35	0	7.0	4.3	.6	1.3
AUG												
12...	1250	78	7.7	17.5	9.5	100	36	0	7.5	4.3	.6	1.2
24...	0600	68	6.8	13.0	9.6	91	35	0	7.0	4.3	.7	1.2
SEP												
10...	1540	75	7.0	8.0	12.0	103	39	1	7.6	4.8	.7	1.1

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

ARCTIC-SLOPE ALASKA--Continued

690530154390600 - UNNAMED LK NW OF KAKVUIYAT BEND NR UMIAT AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)
JUN											
18...	38	0	5.0	2.3	.1	.2	31	.00	.00	.00	.00
29...	41	0	2.2	.5	.1	.3	35	.00	--	.00	--
JUL											
13...	41	0	3.6	.5	.1	.4	38	.00	.00	.01	.00
27...	48	0	.6	.5	.1	.5	39	.00	.00	.00	.00
AUG											
12...	51	0	2.6	.4	.1	.7	43	.00	.00	.00	.00
24...	44	0	3.8	.3	.1	.8	40	.01	.01	.01	.01
SEP											
10...	46	0	2.1	.2	.1	.9	40	.00	.00	.01	.00

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)
JUN											
18...	.01	.01	.04	.01	.07	.05	.10	.05	.05	.11	.05
29...	.00	--	.01	--	.20	--	.21	--	--	.21	--
JUL											
13...	.01	.00	.04	.02	.31	.38	.35	.00	.38	.36	.38
27...	.00	.00	.02	.04	.37	.40	.39	.00	.44	.39	.44
AUG											
12...	.00	.10	.01	.00	1.4	.77	1.4	.63	.77	1.4	.87
24...	.02	.00	.04	.01	2.8	.58	2.8	2.2	.59	2.8	.59
SEP											
10...	.01	.03	.03	.01	.62	.54	.65	.10	.55	.66	.55

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
JUN											
18...	.00	.00	.00	.00	--	--	--	--	--	--	--
29...	.01	--	.00	--	3	2	1	0	0	<1	10
JUL											
13...	.02	.01	.00	.00	--	--	--	--	--	--	--
27...	.01	.00	.00	.00	--	--	--	--	--	--	--
AUG											
12...	.01	.00	.00	.00	--	--	--	--	--	--	--
24...	.01	.00	.00	.00	1	0	1	0	0	<1	20
SEP											
10...	.01	.01	.00	.00	--	--	--	--	--	--	--

DATE	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)
JUN											
18...	--	--	--	--	--	240	170	70	--	--	--
29...	0	10	7	7	0	190	160	30	8	8	0
JUL											
13...	--	--	--	--	--	210	110	100	--	--	--
27...	--	--	--	--	--	400	280	120	--	--	--
AUG											
12...	--	--	--	--	--	400	300	100	--	--	--
24...	20	0	1	0	1	480	370	110	0	0	0
SEP											
10...	--	--	--	--	--	--	--	230	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

ARCTIC-SLOPE ALASKA--Continued

690530154390600 - UNNAMED LK NW OF KAKVUIYAT BEND NR UMIAT AK--Continued

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
JUN											
18...	8	--	--	--	--	--	--	--	--	--	4.3
29...	<1	.1	.1	.0	0	0	0	10	7	<3	6.2
JUL											
13...	4	--	--	--	--	--	--	--	--	--	5.5
27...	40	--	--	--	--	--	--	--	--	--	4.8
AUG											
12...	9	--	--	--	--	--	--	--	--	--	8.3
24...	5	.0	.0	.0	0	0	0	0	0	<3	7.6
SEP											
10...	--	--	--	--	--	--	--	--	--	--	9.0

DATE	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	SESTON, TOTAL (MG/L)	SESTON ASH WEIGHT (MG/L)	CHLOR-A PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	CHLOR-B PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	BIOMASS CHLOROPHYLL RATIO PERIPHYTON (UNITS)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L)	BIOMASS CHLOROPHYLL RATIO PLANKTON (UNITS)
JUN											
18...	1.1	--	--	--	--	--	--	--	--	--	--
29...	.3	--	--	--	--	--	--	--	.255	.000	7059
JUL											
13...	.2	.040	.060	100	98	.002	.000	10000	.238	.048	--
27...	.2	.340	.720	95	94	.014	.004	2714	.389	.042	2314
AUG											
12...	.4	.160	.690	98	97	.039	.003	13590	.229	.035	6114
24...	.8	.260	.640	103	102	.067	.008	5672	.304	.000	3289
SEP											
10...	.9	.080	.160	94	92	.005	.000	16000	.583	.018	2401

GROUND-WATER LEVELS

SOUTHEAST ALASKA

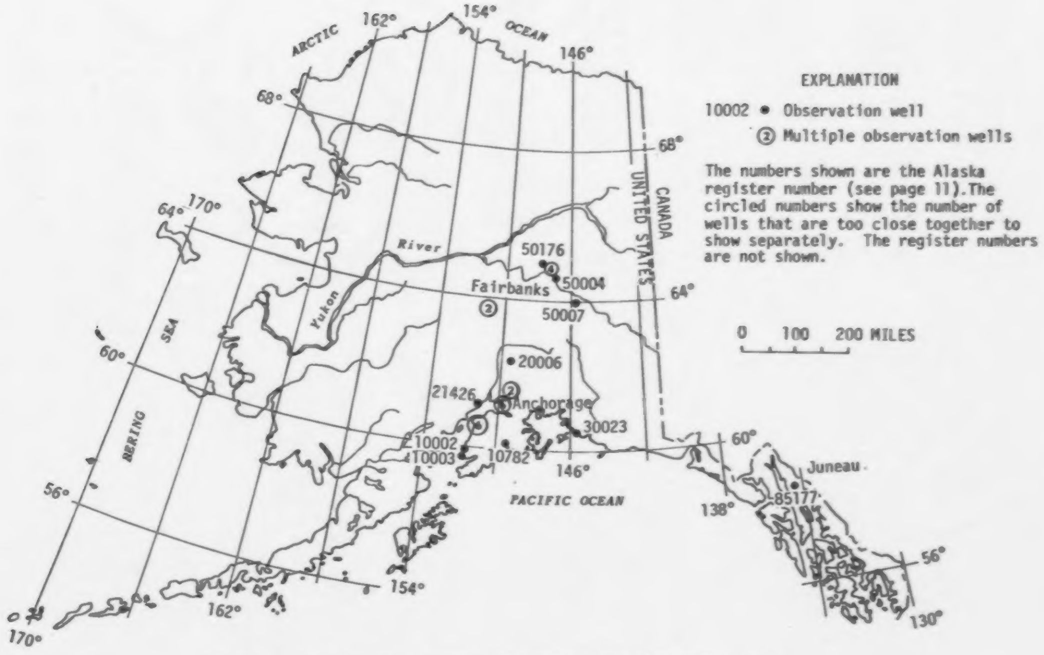
JUNEAU

582422134342001. Local number, CD04006618ABDD1001 85177.
LOCATION.--Lat 58°24'22", long 134°34'20", Hydrologic Unit 19060000, Mendenhall Loop Road, near Juneau. Owner: U.S. Forest Service.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Bored unused water-table well, diameter 6 in (0.15 m), depth 100 ft (30.5 m), screened 90 to 100 ft (27.4 to 30.5 m).
DATUM.--Altitude of land-surface datum is 69 ft (21.0 m). Measuring point: Base of recorder shelter 5.00 ft (1.52 m) above land-surface datum.
REMARKS.--Water level-fluctuates with seasonal changes in flow of the Mendenhall River, 100 ft (30 m) southwest of the well.
PERIOD OF RECORD.--June 1967 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.35 ft (0.11 m) above land-surface datum, Oct. 2, 1970; lowest, 10.26 ft (3.13 m) below land-surface datum, Mar. 23, 1969.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET). WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.89	1.14	3.19			---	5.25	4.82	2.89	4.41	3.42	6.44
10	2.00	2.20	2.85			7.27	5.20	4.83	2.84	3.37	4.07	6.75
15	1.41	3.07	2.99			5.96	5.25	4.96	3.45	3.72	4.65	5.49
20	.44	4.09	3.54			5.41	5.54	4.89	4.12	2.84	5.27	5.22
25	.47	4.55	4.39			4.68	5.48	4.52	4.73	2.46	5.65	4.72
EOM	.73	3.29	3.40			5.03	5.20	4.26	4.59	3.31	6.14	3.60

WTR YEAR 1979 HWL 0.40 OCT 22 & 23 LWL 8.11 MAR 8



EXPLANATION

10002 ● Observation well

② Multiple observation wells

The numbers shown are the Alaska register number (see page 11). The circled numbers show the number of wells that are too close together to show separately. The register numbers are not shown.

Figure 4.--Map showing location of ground-water observation wells.

SOUTH-CENTRAL ALASKA

CORDOVA

603228145442601. Local number, CC01500327BDCB1004 30023.

LOCATION.--Lat 60°32'28", long 145°14'26", Hydrologic Unit 19050003, Lefeure Street near west end of Eyak Lake, Cordova. Owner: City of Cordova.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled public-supply (unused) artesian well, diameter 10 in (0.25 m), depth 82 ft (25.0 m), backfilled to 71 ft (21.6 m), screened 48.5 to 71 ft (14.8 to 21.6 m).

DATUM.--Altitude of land-surface datum is 32 ft (10 m). Measuring point: Top of shelter floor 4.00 ft (1.22 m), above land-surface datum.

REMARKS.--Major water-level fluctuations caused by variable pumping of nearby production wells.

PERIOD OF RECORD.--February 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.82 ft (2.08 m) below land-surface datum, Nov. 30, 1976; lowest, 46.88 ft (14.29 m) below land-surface datum, Dec. 28, 1975.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.28	13.41	12.50	15.25	15.40	24.20	14.62	11.60	14.33	15.99	20.86	---
2	14.83	13.49	13.38	15.37	15.24	24.85	14.54	11.53	13.85	17.13	21.63	---
3	14.69	13.80	13.46	15.40	15.17	24.38	15.19	14.15	13.67	14.84	21.50	---
4	14.48	11.85	13.72	15.44	15.10	24.02	15.15	14.10	13.66	14.67	22.25	---
5	13.77	10.24	14.00	15.47	15.11	23.23	14.54	14.08	13.69	15.39	25.27	---
6	13.49	13.57	13.67	15.49	15.51	22.89	14.30	14.08	13.96	15.58	18.21	---
7	13.03	13.84	13.20	15.49	15.41	22.83	14.27	14.08	14.12	15.40	17.33	---
8	12.98	14.04	10.80	15.51	15.34	22.78	14.21	14.11	14.20	15.63	20.68	---
9	12.50	14.30	13.22	15.52	15.34	22.04	14.21	14.06	14.23	14.97	20.78	---
10	13.10	14.40	13.37	16.60	15.70	21.82	14.45	14.03	14.38	14.83	20.40	---
11	13.58	14.40	13.54	15.48	15.54	21.76	14.29	14.13	14.45	15.51	20.42	---
12	14.00	14.60	13.65	15.90	15.40	21.80	13.93	14.17	14.57	15.84	20.56	---
13	13.96	14.70	13.65	15.65	15.40	21.39	14.23	14.15	14.61	17.72	16.60	---
14	14.02	14.80	13.79	15.40	16.93	21.30	14.33	14.15	14.70	18.36	14.84	---
15	14.03	14.80	13.85	15.30	15.85	21.37	15.40	14.19	11.72	18.56	14.48	---
16	14.25	14.91	14.00	15.07	15.78	21.50	14.93	14.18	11.25	15.49	13.42	---
17	13.71	15.10	14.13	14.67	16.30	21.47	15.61	14.18	11.19	15.17	13.22	---
18	13.18	15.20	14.07	14.67	15.97	21.07	15.80	10.90	11.19	18.58	11.32	---
19	13.09	15.28	11.60	14.77	15.91	20.70	16.64	10.40	14.20	18.63	13.33	---
20	13.16	15.28	14.10	14.80	21.48	20.70	15.38	10.32	14.98	18.80	13.82	---
21	13.27	15.09	14.41	14.70	19.23	20.72	15.37	10.32	15.14	18.85	---	---
22	13.10	14.90	14.41	14.71	24.30	20.39	22.40	10.34	16.23	18.87	---	---
23	13.18	14.87	14.41	15.72	24.71	14.60	21.26	10.24	15.48	19.74	---	---
24	13.21	14.87	14.70	15.54	24.27	13.70	16.73	13.42	15.40	17.15	---	---
25	13.16	14.80	14.94	15.43	24.64	13.69	12.85	13.74	14.79	20.01	---	---
26	13.06	14.33	14.90	15.36	24.39	13.69	11.82	13.84	13.85	20.58	---	---
27	13.08	14.15	15.07	15.17	24.11	13.70	11.55	14.06	13.49	20.87	---	13.13
28	13.41	13.80	15.11	15.04	24.07	13.81	11.47	14.21	13.32	20.80	---	13.15
29	13.39	13.80	15.18	15.09	---	13.99	14.09	14.31	13.32	25.18	---	13.22
30	10.80	12.22	15.20	16.22	---	14.14	14.52	14.40	15.35	19.15	---	13.30
31	12.91	---	15.20	16.94	---	14.27	---	14.40	---	17.54	---	---
MIN	10.80	10.24	10.80	14.67	15.10	13.69	11.47	10.24	11.19	14.67		

WTR YEAR 1979 HWL RECORDED 10.24 NOV 5 & MAY 23 LWL RECORDED 38.99 AUG 6

SOUTH-CENTRAL ALASKA

SEWARD

600808149254802. Local number, SB00100134CADC2003 10782.
LOCATION.--Lat 60°07'52", long 149°25'56", Hydrologic Unit 1905003, at Fort Raymond Army recreation camp, near Seward. Owner: City of Seward.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled unused artesian test well, diameter 8 in (0.20 m), depth 141 ft (43.0 m), screen reportedly installed at bottom of well.
DATUM.--Altitude of land-surface datum is 46 ft (14 m). Measuring point: Top of casing at land-surface datum.
REMARKS.--Levels sometimes drawn down as much as 1.5 ft (0.5 m) by nearby pumping.
PERIOD OF RECORD.--July-August 1964, October 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 13.07 ft (3.98 m) below land-surface datum, Dec. 1, 1976; lowest, 27.72 ft (8.44 m) below land-surface datum, Apr. 14, 1979.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.56	17.48	21.43	23.55	23.89	26.36	26.20	24.43	23.61	23.87	22.86	21.95
2	22.58	17.73	21.29	23.64	23.89	25.98	25.42	24.03	23.58	23.96	22.94	21.99
3	22.61	18.17	21.32	23.33	23.88	25.54	25.09	23.95	23.54	24.82	22.93	21.80
4	22.59	18.52	21.40	23.26	---	25.57	25.92	24.12	23.55	24.42	23.49	21.33
5	22.61	18.89	21.46	23.34	---	25.66	25.82	23.98	23.55	23.08	23.12	21.04
6	22.34	19.19	21.50	23.87	---	25.63	25.30	23.84	23.62	23.79	23.14	21.28
7	21.90	19.61	21.47	23.93	---	25.99	25.28	23.67	23.68	23.75	22.99	21.23
8	21.52	20.05	21.29	23.52	---	25.99	25.28	23.57	23.68	23.65	22.42	21.15
9	21.17	20.40	21.16	23.44	---	25.99	25.28	22.72	23.76	23.64	22.60	21.07
10	21.04	20.68	21.03	23.45	---	25.65	25.73	23.00	24.17	23.65	22.12	20.96
11	20.61	20.90	21.02	23.50	---	26.00	24.61	22.94	24.21	23.59	21.42	20.59
12	20.91	21.00	21.02	23.51	24.81	25.97	24.95	22.94	23.75	23.67	20.92	20.65
13	20.59	21.32	21.02	23.54	24.73	26.47	25.21	22.93	23.69	23.85	20.74	20.66
14	20.50	21.50	21.02	23.55	25.08	25.87	26.30	22.91	23.88	23.87	20.60	20.23
15	20.39	21.68	21.14	24.07	25.08	25.44	26.51	22.89	23.63	24.33	20.40	19.34
16	20.38	21.83	21.31	24.04	25.11	25.38	26.31	22.88	23.70	23.16	21.10	18.92
17	20.70	21.95	21.39	24.00	25.14	25.99	26.45	23.00	23.65	22.90	22.25	18.61
18	19.81	22.00	21.42	23.99	25.47	26.18	26.43	23.02	23.71	23.35	23.63	---
19	18.91	22.03	21.58	24.07	25.40	25.95	25.73	22.52	24.19	23.79	24.24	---
20	18.48	22.08	21.72	24.12	25.34	26.06	25.76	22.48	24.30	23.10	24.40	---
21	18.27	22.14	21.85	24.12	26.48	26.16	25.84	22.49	24.34	23.91	24.14	---
22	18.32	22.17	22.01	23.77	26.17	26.19	25.80	23.02	23.92	23.91	23.85	---
23	18.53	22.26	22.14	23.67	26.27	26.36	24.56	23.12	24.36	23.98	23.86	---
24	18.65	22.34	22.33	23.68	26.18	26.43	25.71	23.12	24.35	23.65	23.71	---
25	18.36	22.44	22.46	23.86	26.12	26.45	25.30	23.16	23.96	23.30	23.40	---
26	17.98	22.25	22.57	23.84	26.15	26.16	25.45	23.17	23.83	23.10	23.12	---
27	17.60	22.07	22.66	23.80	26.14	26.13	24.86	23.17	23.84	23.12	22.91	---
28	17.55	21.89	22.73	24.29	26.13	26.18	24.68	22.60	23.80	22.75	22.80	---
29	17.53	21.74	22.80	23.89	---	26.35	24.58	22.55	23.73	22.66	22.82	---
30	17.45	21.59	23.39	23.88	---	26.11	24.48	23.44	23.85	22.55	22.25	---
31	17.42	---	23.47	23.88	---	26.10	---	23.67	---	22.50	22.05	---
MIN	17.42	17.48	21.02	23.26	23.88	25.38	24.48	22.48	23.54	22.50	20.40	

WTR YEAR 1979 HWL RECORDED 17.42 OCT 31 LWL RECORDED 27.72 APR 14

KENAI PENINSULA BOROUGH

594515151492201. Local number, SC00501510CCAC1001 10003.
LOCATION.--Lat 59°45'15", long 151°49'22", Hydrologic Unit 19050002, mile 161, Old Sterling Highway near Anchor Point. Owner: Raymond Williams.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled domestic artesian well, diameter 6 in (0.15 m), depth 100 ft (30.5 m), perforated liner 91 to 100 ft (27.7 to 30.5 m).
DATUM.--Altitude of land-surface datum is 240 ft (73 m). Measuring point: top of casing plate 4.80 ft (1.46 m) below land-surface datum.
PERIOD OF RECORD.--May 1962 to September 1970, May 1972 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.85 ft (10.93 m) below land-surface datum, May 31, 1963; lowest measured, 47.89 ft (14.60 m) below land-surface datum, June 20, 1964.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 3	38.48	FEB 14	38.27	APR 2	38.65	MAY 3	37.22	JUN 13	37.54	AUG 14	38.01
DEC 8	37.10	MAR 20	39.04	APR 20	38.89	MAY 17	36.96	JUL 18	38.84	SEP 19	41.47

SOUTH-CENTRAL ALASKA

KENAI PENINSULA BOROUGH--Continued

595604151432301. Local number, SC00301418ADBB1004 10002.
LOCATION.--Lat 59°55'17", long 151°44'33", Hydrologic Unit 19050002, at Happy Valley, mile 196, Sterling Highway. Owner: U.S. Geological Survey.
AQUIFER.--Gravel of Pleistocene age.
WELL CHARACTERISTICS.--Augered water-table observation well, diameter 2 in (0.05 m), depth 38 ft (11.6 m), screened from 35 to 38 ft (10.7 to 11.6 m).
DATUM.--Altitude of land-surface datum is 150 ft (46 m). Measuring point: Top of pipe, 3.20 ft (0.98 m) above land-surface datum.
PERIOD OF RECORD.--June 1968 to September 1979 (discontinued).
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.27 (1.00 m) below land-surface datum, May 4, 1977; lowest measured, 12.18 ft (3.71 m) below land-surface datum, Mar. 3, 1970.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 3	9.75	MAR 20	10.21	APR 30	5.46	MAY 17	5.91	JUN 13	7.21	AUG 14	9.31
DEC 8	10.09	APR 3	10.10	MAY 3	5.45	MAY 29	6.52	JUL 18	8.55	SEP 19	10.14
FEB 14	9.60	APR 16	8.85	MAY 14	5.79						

602926151042201. Local number, SB00501029CDAC1001 10001.
LOCATION.--Lat 60°29'26", long 151°04'22", Hydrologic Unit 19050002, Mt. Redoubt Way, Soldotna. Owner: Charles S. Parker.
AQUIFER.--Gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.20 m), depth 100 ft (30.5 m), cased to 100 ft (30.5 m), perforated 81 to 97 ft (24.7 to 29.6 m).
DATUM.--Altitude of land-surface datum is 94 ft (29 m). Measuring point: Shelter floor at top of casing 3.00 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--March 1963 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.38 ft (0.73 m) below land-surface datum, June 28, 1963; lowest, 13.11 ft (4.00 m) below land-surface datum; occurred sometime between Feb. 15 and Apr. 15, 1976.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.00	6.72	7.88	7.69	7.52	7.75	7.76	6.85	7.26	6.72	7.37	7.30
10	6.88	7.04	7.66	7.65	7.85	8.09	7.75	6.76	7.86	6.57	6.79	7.09
15	6.71	7.18	7.79	7.34	7.08	8.32	7.62	7.19	8.24	6.82	6.81	6.67
20	6.93	8.37	7.63	7.68	7.99	8.05	7.43	7.01	7.69	6.87	6.18	6.32
25	6.84	7.85	7.55	7.67	8.06	7.99	7.05	7.04	7.60	6.91	6.89	6.52
EOM	6.68	8.07	7.57	7.78	8.03	8.05	6.92	7.62	6.50	7.13	6.88	6.05

WTR YEAR 1979 HWL 6.05 SEP 30 LWL 11.18 SEP 8

603511151133003. Local number, SB00601128BBDA3003 10683.
LOCATION.--Lat 60°35'11", long 151°13'30", Hydrologic Unit 19050002, by FAA airport towers, City of Kenai. Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 6 in (0.15 m), depth 12 ft (3.7 m), cased to 11 ft (3.4 m), perforated 7 to 11 ft (2.1 to 3.4 m).
DATUM.--Altitude of land-surface datum is 100 ft (30 m). Measuring point: Top of casing 3.00 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--October 1970 to September 1979 (discontinued).
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.26 ft (0.38 m) below land-surface datum, May 9, 1972; lowest recorded, 8.64 ft (2.63 m) below land-surface datum, Apr. 5 to 18, 1976, when float rested on obtrusion in well.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.38	3.33	4.10	4.93	5.69	6.71	4.19	2.90	3.62	4.47	5.42	6.23
10	3.77	3.66	3.64	4.88	6.01	6.92	3.09	2.88	3.93	4.61	5.36	6.40
15	4.07	3.87	3.96	4.78	6.17	6.98	2.81	3.05	4.35	4.12	5.15	6.10
20	3.56	4.38	4.22	5.32	6.36	7.07	1.87	3.20	4.38	4.39	5.16	5.50
25	3.34	3.71	4.63	5.38	6.44	5.42	2.51	3.31	3.62	4.38	5.69	4.17
EOM	3.33	3.68	4.72	5.70	6.66	5.27	2.75	3.49	4.03	5.01	5.93	3.73

WTR YEAR 1979 HWL 1.87 APR 20 LWL 7.10 MAR 20

SOUTH-CENTRAL ALASKA

KENAI PENINSULA BOROUGH--Continued

603846151002701. Local number, SB00601003ABAC1001 10646.
LOCATION.--Lat 60°38'46", long 151°00'27", Hydrologic Unit 19050002, Marathon Oil Well Road in Beaver Creek basin, Kenai area. Owner: Marathon Oil.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (0.15 m), depth 65 ft (19.8 m), cased to 65 ft (19.8 m).
DATUM.--Altitude of land-surface datum is 150 ft (46 m). Measuring point: Top of casing, 1.30 ft (0.40 m) above land-surface datum.
REMARKS.--Levels unaffected by distant pumping. Missing record due to repetative clock failure.
PERIOD OF RECORD.--August 1968 to November 1973, April 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.53 ft (2.91 m) below land-surface datum, May 22, 1979; lowest, 14.26 ft (4.35 m) below land-surface datum, Apr. 4, 1969.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.42										---	11.06
10	11.32										10.80	11.14
15	11.29										10.80	11.00
20	11.18										10.84	10.92
25	11.14										10.92	10.71
EOM	11.02										10.97	10.48

WTR YEAR 1979 HWL MEASURED 9.53 MAY 22 LWL RECORDED 11.48 OCT 3 & 4
NOTE.--Additional water levels were measured at 11.05 ft on Nov. 3, 9.60 ft on Apr. 23, 9.53 ft on May 22, and 10.59 ft on June 20.

604038151204303. Local number, SB00701223CCDB3008 10004.
LOCATION.--Lat 60°40'36", long 151°20'43", Hydrologic Unit 19050002, mile 1, Miller Loop Road, North Kenai. Owner: Collier Carbon and Chemical Company.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (0.15 m), depth 112 ft (34.1 m), screened 106 to 110 ft (32.3 to 33.5 m).
DATUM.--Land-surface datum is 129.7 ft (39.5 m) National Geodetic Vertical Datum. Measuring point: Top of casing 2.00 ft (0.61 m) above land-surface datum.
REMARKS.--Large water-level fluctuations caused by nearby pumping. Well also known as Collier's 5B.
PERIOD OF RECORD.--December 1967 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 46.52 ft (14.18 m) below land-surface datum, Feb. 7, 1968; lowest, 65.94 ft (20.10 m) below land-surface datum, June 16, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60.86	55.38	60.77	60.91	60.65	60.82	60.65	60.31	58.75	58.84	59.47	---
2	60.90	57.75	60.65	60.96	60.66	60.80	60.45	60.37	58.83	58.83	59.75	---
3	56.20	59.15	60.89	60.69	60.77	60.80	60.30	60.07	58.20	58.85	59.84	---
4	55.57	59.90	60.25	60.67	60.77	60.81	60.45	59.97	58.33	58.92	60.17	---
5	55.85	60.40	60.02	60.64	60.73	60.85	59.96	59.47	58.36	58.93	59.72	---
6	55.25	60.36	60.06	60.86	58.68	60.66	60.19	59.62	58.87	58.94	59.41	---
7	58.47	60.30	59.84	57.43	60.01	60.63	60.56	60.42	59.10	59.00	59.56	---
8	60.29	59.95	60.40	55.73	60.81	60.04	60.44	60.42	58.95	59.44	59.45	---
9	60.20	59.70	60.17	60.05	60.95	59.92	60.27	60.21	59.11	58.85	59.24	---
10	60.27	59.77	60.51	60.37	61.05	60.48	60.32	59.68	58.74	58.82	59.05	---
11	56.52	59.88	59.85	56.49	61.01	60.61	60.99	59.17	58.78	59.18	59.11	---
12	55.33	59.83	58.78	58.76	60.98	60.24	60.70	59.59	58.89	59.51	59.12	---
13	54.90	60.11	59.10	60.07	60.89	60.23	60.72	59.51	59.07	59.26	59.55	---
14	54.79	60.14	60.52	60.35	60.69	59.90	60.43	59.07	58.92	59.14	59.36	---
15	56.73	60.13	60.64	60.19	60.80	59.87	60.98	59.14	59.00	58.42	59.24	---
16	57.03	60.14	60.65	60.31	60.80	60.38	60.83	58.38	58.78	58.87	---	---
17	55.13	60.30	60.65	60.32	60.81	60.30	60.74	58.81	58.55	58.50	---	57.79
18	54.85	60.69	60.01	60.40	60.80	60.30	60.87	58.24	58.46	58.57	---	57.27
19	54.68	60.40	60.18	60.55	60.86	60.60	60.85	58.15	58.08	58.62	---	57.24
20	59.20	60.40	61.13	60.61	60.91	60.39	60.64	58.66	58.40	58.56	---	
21	60.29	60.44	57.31	59.78	60.94	60.70	60.94	58.50	57.61	58.37	---	57.15
22	60.10	60.35	55.36	59.94	60.97	60.65	60.33	58.36	58.18	58.47	---	57.14
23	59.44	60.38	57.61	60.05	60.95	60.43	60.18	59.17	58.42	58.45	---	56.34
24	59.82	60.13	59.97	60.04	60.87	60.46	60.02	59.76	58.56	58.07	---	56.90
25	59.94	60.48	60.76	60.16	60.86	60.76	60.20	59.98	58.06	58.25	---	56.92
26	59.63	60.72	60.77	60.57	60.81	60.13	60.17	59.18	58.81	58.24	---	56.40
27	59.50	60.81	59.08	60.66	60.69	59.93	60.21	58.78	58.73	58.94	---	56.44
28	59.92	60.70	57.76	60.69	60.74	59.88	60.73	58.80	59.02	58.89	---	56.57
29	59.90	61.07	58.78	60.78	---	59.89	60.43	59.18	58.84	58.93	---	56.78
30	57.03	60.79	60.44	60.64	---	60.46	60.43	59.08	58.99	59.03	---	56.80
31	56.13	---	60.74	60.70	---	60.67	---	58.62	---	59.20	---	---
MIN	54.68	55.38	55.36	55.73	58.68	59.87	59.96	58.15	57.61	58.07		

WTR YEAR 1979 HWL 54.68 OCT 19 LWL 62.89 NOV 17

604133151214803. Local number, SB00701215DCBC3 11216.

LOCATION.--Lat 60°41'33", long 151°21'48", Hydrologic Unit 19050002, Bernice Lake campground, North Kenai. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table test well, diameter 6 in (0.15 m), depth 52.4 ft (16.0 m), cased to 52.4 ft (16.0 m).

DATUM.--Land-surface datum is 84.6 ft (25.8 m) National Geodetic Vertical Datum. Measuring point: Top of casing 2.00 ft (0.61 m) above land-surface datum.

REMARKS.--Well is 4 ft (1.2 m) east of well 10941.

PERIOD OF RECORD.--June 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.78 ft (2.98 m) below land-surface datum, June 23, 1977; lowest, 13.38 ft (4.08 m) below land-surface datum, Oct. 7, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.35	12.70	12.64	12.28	12.53	12.98	13.05	11.13	10.81	11.23	11.54	11.74
10	13.30	12.72	12.49	12.27	12.65	13.06	12.98	10.90	10.94	11.27	---	11.82
15	13.27	12.68	12.42	12.27	12.65	13.10	12.87	10.76	11.04	11.36	---	11.86
20	13.13	12.73	12.35	12.39	12.77	13.15	12.80	10.74	11.09	11.37	11.50	11.89
25	13.05	12.65	12.31	12.43	12.83	13.03	12.07	10.73	11.10	11.42	11.62	11.83
EOM	12.82	12.63	12.23	12.48	12.88	13.06	11.54	10.78	11.17	11.46	11.68	11.70
MIN	12.82	12.63	12.23	12.22	12.48	12.90	11.54	10.71	10.78	11.19	11.43	11.69

WTR YEAR 1979 HWL 10.71 May 22 & 23 LWL 13.38 OCT 7

604133151214802. Local number, SB00701215DCBC2004 10941.

LOCATION.--Lat 60°41'33", long 151°21'48", Hydrologic Unit 19050002, Bernice Lake campground, North Kenai. Owner: State of Alaska.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian test well, diameter 6 in (0.15 m), depth 202 ft (61.6 m), cased to 191 ft (58.2 m), screened 191 to 196 ft (58.2 to 59.7 m).

DATUM.--Land-surface datum is 84.6 ft (25.8 m) National Geodetic Vertical Datum. Measuring point: Top of casing 2.00 ft (0.61 m) above land-surface datum.

PERIOD OF RECORD.--June 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.63 ft (2.94 m) below land-surface datum, Dec. 15, 16, and 25, 1972; lowest, 14.08 ft (4.29 m) below land-surface datum, Sept. 10, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.96	13.25	13.24	12.88	13.11	13.64	13.64	11.82	11.49	11.92	12.21	12.37
10	13.88	13.33	13.03	12.83	13.27	13.70	13.58	11.58	11.65	11.93	12.20	12.44
15	13.85	13.26	12.98	12.85	13.26	13.72	13.48	11.44	11.74	12.03	12.02	12.48
20	13.70	13.31	12.93	12.99	13.42	13.78	13.41	11.45	11.76	12.04	12.15	12.51
25	13.63	13.21	12.89	13.04	13.45	13.63	12.67	11.43	11.79	12.09	12.27	12.46
EOM	13.39	13.19	12.80	13.07	13.54	13.66	12.21	11.49	11.87	12.09	12.31	12.35
MIN	13.39	13.19	12.80	12.80	13.05	13.52	12.21	11.40	11.47	11.90	11.98	12.32

WTR YEAR 1979 HWL 11.40 MAY 22-24 LWL 14.03 OCT 4

610647151153001. Local number, SB01201120DBDD1001 21426.
LOCATION.--Lat 61°06'47", long 151°15'30", Hydrologic Unit 19050002, 4 mi (6 km) northwest of Tyonek.
Owner: U.S. Geological Survey.
AQUIFER.--Claystone and coal of Tertiary age.
WELL CHARACTERISTICS.--Drilled artesian observation well, hole diameter 6 in (0.15 m) to 83 ft (25.3 m) and 4 in (0.10 m) diameter to 320 ft (97.5 m); 6 in (0.15 m) steel casing to 43 ft (13.1 m), 4 in (0.10 m) plastic pipe to 206 ft (62.8 m), pre-perforated 106 to 206 ft (32.3 m to 62.8 m), clay plug in pipe 194 to 206 ft (59.2 m to 62.8 m).
DATUM.--Altitude of land-surface datum is 210 ft (64 m). Measuring point: Top of 4 in (0.10 m) plastic pipe 2.50 ft (0.76 m) above land-surface datum.
PERIOD OF RECORD.--December 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.06 (6.11 m) below land-surface datum, Apr. 27, 1978; lowest, 29.69 ft (9.04 m) below land-surface datum, Mar. 22 and 23, 1979.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 13	21.50	MAR 29	23.63	JUN 8	23.90
FEB 15	22.73	APR 27	20.06	JUN 23	23.36

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		22.25	25.05	---	27.23	28.46	27.75	21.81	26.92	26.81	25.89	27.43
2		22.33	24.63	---	27.23	28.45	27.75	21.79	26.77	26.58	26.26	26.60
3		22.62	24.69	---	27.37	28.45	27.82	21.76	26.88	26.58	26.76	26.54
4		22.29	25.04	26.44	27.34	28.47	27.81	21.60	26.98	26.89	27.09	26.54
5		22.09	25.20	26.45	27.35	28.47	27.81	21.52	27.18	27.42	25.53	26.89
6		22.16	25.07	26.47	27.43	28.75	27.82	21.51	27.37	---	25.37	27.09
7		22.77	25.01	26.47	27.50	28.78	27.81	21.50	27.82	---	25.36	27.44
8		23.35	25.14	26.49	27.60	28.93	27.84	21.54	28.25	---	25.45	27.63
9		23.44	25.19	26.50	27.60	28.93	27.95	21.82	28.39	---	25.75	27.84
10		23.42	25.38	26.50	27.67	29.02	27.56	21.82	28.44	---	26.08	28.00
11		23.45	25.52	26.69	27.70	29.11	27.32	22.05	28.71	---	26.49	27.84
12		23.52	25.27	26.75	27.71	29.09	27.22	22.71	28.05	---	26.84	27.49
13		23.58	25.23	26.79	27.71	29.07	27.22	23.11	28.05	---	27.08	27.40
14		23.60	25.52	26.65	27.75	29.12	27.25	23.72	28.09	---	27.34	27.39
15		23.66	25.64	26.57	27.80	29.13	27.34	23.89	28.27	28.17	27.52	27.32
16		23.78	25.67	26.59	27.80	29.24	27.45	24.17	28.45	27.96	27.49	27.05
17		24.05	25.42	26.70	27.80	29.25	27.57	24.35	28.44	27.89	27.36	27.03
18		24.18	25.40	26.68	27.80	29.30	27.75	25.06	28.58	27.70	27.35	26.96
19		24.14	25.67	26.83	27.92	29.47	27.94	25.60	28.43	27.63	27.39	26.97
20		24.10	25.71	26.83	28.03	29.61	28.05	26.06	28.29	27.61	24.23	26.97
21		23.87	25.85	26.68	28.03	29.67	28.16	26.32	28.15	25.51	23.66	23.01
22		23.88	25.52	26.72	28.13	29.69	28.19	26.48	28.30	24.91	23.40	21.90
23		24.23	25.52	26.82	28.18	29.68	28.03	26.33	28.59	24.88	23.60	21.79
24		24.39	25.90	26.80	28.12	29.31	27.90	26.44	28.67	24.88	23.89	21.40
25		24.53	26.07	26.78	28.12	28.73	25.57	26.81	28.67	25.08	24.37	21.23
26		24.57	---	26.98	28.30	28.20	23.97	26.52	28.48	25.56	24.71	21.26
27		24.60	---	27.07	28.33	27.96	23.47	26.53	28.12	25.89	25.14	21.67
28		24.95	---	27.06	28.41	27.78	23.32	26.74	27.69	26.28	25.77	22.11
29		25.19	---	27.22	---	27.76	22.55	27.07	27.55	25.54	26.06	22.66
30		25.12	---	27.33	---	27.75	22.30	27.29	27.19	25.53	26.43	22.62
31		---	---	27.35	---	27.75	---	27.72	---	25.56	26.88	---
MIN		22.09	24.63	26.44	27.23	27.75	22.30	21.50	26.77	24.88	23.60	21.23

WTR YEAR 1979 HWL 21.23 SEP 25 LWL 29.69 MAR 22 & 23

SOUTH-CENTRAL ALASKA

MUNICIPALITY OF ANCHORAGE

611001149534601. Local number, SB01200401AABB1001 00590.
LOCATION.--Lat 61°10'01", long 149°53'46", Hydrologic Unit 19050002, Arctic Boulevard at Alaska Railroad crossing, Anchorage. Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 8 in (0.20 m), depth 250.5 ft (76.4 m), cased to 247 ft (75.3 m).
DATUM.--Altitude of land-surface datum is 105 ft (32 m). Measuring point: Top of casing 3.94 ft (1.20 m) above land-surface datum.
REMARKS.--Water levels affected by local and Anchorage area pumping.
PERIOD OF RECORD.--March 1956 to September 1979 (discontinued).
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.35 ft (2.55 m) above land-surface datum, Oct. 31, 1957; lowest, 31.17 ft (9.50 m) below land-surface datum, July 19, 1977.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.19	22.28	23.12	21.64	18.46	22.54	25.20	24.75	26.20	25.29	23.23	21.54
10	23.51	22.28	23.02	21.28	19.59	22.92	25.46	24.85	26.64	25.14	23.10	21.64
15	24.04	22.73	23.20	21.20	---	23.32	25.75	25.12	27.24	25.02	22.95	21.90
20	24.28	23.53	23.39	20.98	---	23.38	25.79	25.31	27.28	24.34	22.22	22.07
25	23.97	24.11	22.81	---	21.61	24.39	25.34	25.19	26.50	24.31	21.55	---
EOM	22.25	24.29	22.01	17.82	22.05	24.86	24.90	25.64	25.62	23.87	21.43	---

WTR YEAR 1979 HWL 17.81 FEB 1 LWL 27.47 JUN 18

611049149545101. Local number, SB01300436BAAC1041 02368.
LOCATION.--Lat 61°10'49", long 149°54'51", Hydrologic Unit 19050002, Harding Drive and 45th Street, Anchorage. Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in (0.15 m), depth 18.5 ft (5.6 m), screened 13.5 to 18.5 ft (4.1 to 5.6 m).
DATUM.--Altitude of land-surface datum is 88 ft (26.8 m). Measuring point: Top of casing cap 2.50 ft (0.76 m) above land-surface datum.
PERIOD OF RECORD.--June 1974 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.01 ft (3.66 m) below land-surface datum, Aug. 22, 1979; lowest measured, 13.52 ft (4.12 m) below land-surface datum, Sept. 23, 1974.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	13.10	DEC 21	13.32	FEB 22	13.49	APR 23	12.44	JUN 21	12.58	AUG 22	12.01
NOV 22	13.25	JAN 25	13.51	MAR 23	13.30	MAY 21	12.32	JUL 23	12.19	SEP 21	12.33

611149149553901. Local number, SB01300423DDDB1002 00280.
LOCATION.--Lat 61°11'49", long 149°55'39", Hydrologic Unit 19050002, West Northern Lights Boulevard and Lahonda Drive, Anchorage. Owner: Municipality of Anchorage.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), depth 283 ft (86.3 m), screened 278 to 283 ft (84.7 to 86.3 m).
DATUM.--Altitude of land-surface datum is 47 ft (14 m). Measuring point: Top of casing 1.30 ft (0.40 m) above land-surface datum.
REMARKS.--Water level affected by pumping in the Anchorage area. Tide effect in well is about 0.2 ft (.06 m).
PERIOD OF RECORD.--September 1962 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, flowing over top of casing, 1962 to 1963; lowest, 13.02 ft (3.97 m) below land-surface datum, Apr. 2, 1964.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.46	5.94	6.79	5.99	5.16	6.14	8.63	7.45	7.78	7.45	6.59	5.99
10	6.45	6.33	6.52	5.61	5.47	6.87	8.23	7.33	8.10	7.05	6.49	6.09
15	7.01	8.00	6.57	5.36	5.49	7.12	9.01	7.45	8.20	7.26	6.34	6.03
20	6.82	6.28	6.57	5.46	5.89	7.44	8.17	7.26	8.14	6.64	6.35	---
25	6.71	7.05	6.37	5.33	5.98	7.81	7.63	7.09	7.93	6.85	6.54	6.17
EOM	6.09	6.89	6.15	5.29	6.10	7.76	7.42	7.38	7.45	6.73	5.97	6.03

WTR YEAR 1979 HWL 5.11 FEB 1 LWL 10.45 APR 4

611311149510401. Local number, SB01300317BDAD1003 00114.
LOCATION.--Lat 61°13'11", long 149°51'04", Hydrologic Unit 19050002, 3rd and Concrete Avenues, Anchorage.
Owner: Municipality of Anchorage.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled artesian test well, diameter 8 in (0.20 m), depth 230 ft (70.1 m), slotted 162 to 182 ft (49.4 to 55.5 m) and 190 to 201 ft (57.9 to 61.3 m).
DATUM.--Land-surface datum is 129.3 ft (39.4 m) National Geodetic Vertical Datum. Measuring point: Top of coupling on casing cap 2.66 ft (0.81 m) above land-surface datum.
REMARKS.--Water-level fluctuation caused mainly by pumping of local municipal wells. Datum was established prior to the 1964 earthquake; no adjustments have been determined.
PERIOD OF RECORD.--October 1956 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.88 ft (8.80 m) below land-surface datum, Nov. 29, 1957; lowest measured, 128.17 (39.07 m) below land-surface datum, Apr. 19, 1976.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	61.88	DEC 20	59.66	FEB 21	60.15	APR 23	51.91	JUN 21	51.45	AUG 22	52.27
NOV 21	75.51	JAN 23	65.69	MAR 22	53.74	MAY 21	51.02	JUL-23	52.32	SEP 21	53.75

611336149454401. Local number, SB01300311CDAD1003 00067.
LOCATION.--Lat 61°13'36", long 149°45'44", Hydrologic Unit 19050002, near Glenn Highway and Boniface Parkway, Anchorage. Owner: U.S. Air Force.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), depth 187 ft (57.0 m), cased to 187 ft (57.0 m).
DATUM.--Altitude of land-surface datum is 210 ft (64 m). Measuring point: Top of casing 3.90 ft (1.19 m) above land-surface datum.
REMARKS.--Water levels affected by pumping in the Anchorage area.
PERIOD OF RECORD.--September 1959 to October 1962, September 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.88 ft (4.54 m) below land-surface datum, Oct. 28, 1960; lowest, 34.77 ft (10.60 m) below land-surface datum, May 14 and 18, 1971.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET). WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.37	24.28	26.38	26.32	27.79	28.85	28.62	28.05	27.05	24.13	---	24.14
10	24.11	25.61	26.42	25.79	28.91	28.02	28.57	27.86	25.61	24.06	---	---
15	24.65	24.87	25.80	25.55	---	27.85	28.87	27.21	25.59	24.53	---	---
20	24.60	27.21	25.93	26.88	---	28.12	27.73	27.49	24.80	24.06	---	---
25	24.75	26.18	25.66	27.25	28.93	28.58	27.93	27.11	24.72	24.10	24.01	24.02
EOM	24.30	26.00	26.18	26.97	29.20	28.08	28.00	27.39	24.36	---	23.91	23.89

WTR YEAR 1979 HWL 23.89 SEP 30 LWL 30.08 MAR 2

611444149415401. Local number, SB01300206DBBA1004 00017.
LOCATION.--Lat 61°14'41", long 149°41'54", Hydrologic Unit 19050002, Arctic Valley Road, Fort Richardson.
Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled artesian test well, diameter 6 in (0.15 m), depth 670 ft (204 m), cased to 134 ft (40.8 m), backfilled with gravel to 134 ft (40.8 m) and plugged, perforated 90 to 120 ft (27.4 to 36.6 m) and 130 to 134 ft (39.6 to 40.8 m).
DATUM.--Altitude of land-surface datum is 294 ft (90 m). Measuring point: Top of shelter floor 1.95 ft (0.59 m) above land-surface datum.
REMARKS.--Water levels affected by pumping in the Anchorage area.
PERIOD OF RECORD.--August 1954 to June 1962, September 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 42.15 ft (12.85 m) below land-surface datum, Oct. 28, 1960; lowest, 66.49 ft (20.27 m) below land-surface datum, May 15, 1971.
CORRECTIONS.--Levels published last year are too high except for those in October 1977, which are correct. Add 1.05 ft (0.32 m) to tabulated values and HWL and LWL figures.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET). WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	54.28	54.97	56.54	56.25	57.36	---	59.06	59.07	57.25	---	52.45	52.62
10	54.30	---	56.24	55.85	---	---	59.58	58.97	56.46	53.57	52.40	52.67
15	54.65	---	56.26	55.40	---	---	59.66	58.73	55.76	53.57	52.17	52.54
20	54.76	---	56.15	56.48	---	---	59.54	58.55	55.14	---	52.54	52.71
25	54.68	---	56.27	56.95	---	58.96	59.34	58.20	54.57	53.02	52.48	52.60
EOM	54.53	---	56.17	57.18	---	59.04	59.15	57.77	54.21	52.55	52.25	52.34

WTR YEAR 1979 HWL 52.16 AUG 16 LWL 59.90 APR 15

SOUTH-CENTRAL ALASKA

MATANUSKA-SUSITNA BOROUGH

613417149065401. Local number, SA01700209CCCB1009 20004.
LOCATION.--Lat 61°34'20", long 149°06'50", Hydrologic Unit 19050002, Springer Road, 2 mi (3 km) south of Palmer.
Owner: Glenn Woods.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in (0.10 m), depth 83 ft (25.3 m), cased to 82 ft (25.0 m), slotted at bottom.
DATUM.--Altitude of land-surface datum is 170 ft (52 m). Measuring point: Top of casing 0.50 ft (0.15 m) above land-surface datum.
PERIOD OF RECORD.--July 1949 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 69.58 ft (21.21 m) below land-surface datum, July 29, 1964; lowest measured, 77.36 ft (23.58 m) below land-surface datum, Mar. 26, 1975.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	72.77	DEC 21	73.18	FEB 22	73.47	APR 25	72.97	JUN 26	71.15	AUG 27	71.32
NOV 21	73.13	JAN 25	73.54	MAR 26	72.89	MAY 24	72.85	JUL 26	71.40	SEP 24	71.98

613630149084302. Local number, SA01800232BCCB2002 20002.
LOCATION.--Lat 61°36'30", long 149°08'43", Hydrologic Unit 19050002, Scott Road, near Palmer.
Owner: City of Palmer.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Drilled unused artesian well. Diameter 8 in (0.20 m), depth 159 ft (48.5 m), screened 139 to 159 ft (42.4 to 48.5 m).
DATUM.--Altitude of land-surface datum is 390 ft (119 m). Measuring point: Top of 1.5 in (.04 m) diameter vertical pipe in concrete well foundation 17.25 ft (5.26 m) below land-surface datum.
REMARKS.--Water-level fluctuations occasionally caused by nearby pumping.
PERIOD OF RECORD.--June 1957 to September 1979 (discontinued).
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 44.77 ft (13.65 m) below land-surface datum, Apr. 27, 1966; lowest measured, 62.50 ft (19.04 m) below land-surface datum, Feb. 22, 1979.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	47.72	DEC 21	47.74	FEB 22	62.50	APR 25	47.37	JUN 26	47.58	AUG 27	48.50
NOV 21	47.75	JAN 25	47.77	MAR 26	48.04	MAY 24	46.87	JUL 26	46.83	SEP 24	48.59

621923150063501. Local number, SB02600524DCDC1003 20006.
LOCATION.--Lat 62°19'23", long 150°06'35", Hydrologic Unit 19050002, north end of airstrip, Talkeetna.
Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Augered test water-table well, diameter 2 in (0.05 m), depth 47 ft (14.3 m), sand point screen 44 to 47 ft (13.4 to 14.3 m).
DATUM.--Altitude of land-surface datum is 340 ft (104 m). Measuring point: Top of pipe 2.60 ft (0.79 m) above land-surface datum.
REMARKS.--Water levels closely reflect local streamflow conditions.
PERIOD OF RECORD.--September 1967 to September 1979 (discontinued).
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.53 ft (1.08 m) below land-surface datum, Aug. 12, 1971; lowest measured, 9.83 ft (3.00 m) below land-surface datum, Apr. 5, 1969.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 21	8.30	MAY 10	6.15	AUG 1	5.78
APR 5	9.11	JUN 28	5.88	SEP 5	7.88

YUKON ALASKA

FORT GREELY

635947145435101. Local number, FD01101011BDAA1003 50007.
LOCATION.--Lat 63°59'47", long 145°43'51", Hydrologic Unit 19030004, at Fort Greely about 1,500 ft (460 m) west of West Third Street and East Post Road intersection. Owner: U.S. Army.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), original depth 230 ft (70 m), top of sediment in well about 217 ft (66 m), casing information not available.
DATUM.--Altitude of land-surface datum is 1,300 ft (400 m). Measuring point: Top of casing, 4.00 ft (1.22 m) above land-surface datum.
REMARKS.--Water level reflects changes in the Delta River 1.8 mi (1.15 km) to the west.
PERIOD OF RECORD.--November 1965 to September 1975, August 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 182.8 ft (55.7 m) below land-surface datum, Sept. 30, 1979; lowest, dry at 216.7 ft (66.0 m) at various times.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	194.8	---	---	203.2	205.3	206.5	---	193.9	184.9
10	---	---	191.1	195.3	---	201.2	203.8	205.3	206.2	---	192.3	184.2
15	---	---	192.0	195.6	---	202.5	204.0	205.5	---	---	190.5	183.6
20	---	---	192.6	196.6	---	202.1	204.5	205.9	---	198.7	189.2	183.3
25	---	---	193.4	197.0	---	202.4	204.7	206.2	---	197.4	187.6	183.0
EOM	---	---	194.1	197.7	---	202.9	205.0	206.4	---	195.6	185.9	182.8

WTR YEAR 1979 HWL MEASURED 182.8 SEP 30 LWL RECORDED 206.6 JUN 6

FAIRBANKS NORTH STAR BOROUGH

643916147043501. Local number, FD00300314ADCC1001 50004.
LOCATION.--Lat 64°39'11", long 147°04'35", Hydrologic Unit 19030004, building 4355, Eielson Air Force Base. Owner: U.S. Air Force.
AQUIFER.--Sand and gravel of Quaternary age.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in (0.20 m), depth 101 ft (30.8 m), casing information not available.
DATUM.--Altitude of land-surface datum is 540 ft (165 m). Measuring point: Top of metal plate 1.00 ft (0.30 m) above land-surface datum.
PERIOD OF RECORD.--August 1965 to July 1975, April 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.87 ft (2.09 m) below land-surface datum, July 27, 1967; lowest, 9.90 ft (3.02 m) below land-surface datum, Nov. 11, 1969.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET). WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.55	9.61	9.32	9.06	9.06	8.71	8.64	7.79	9.07	9.17	8.89	9.14
10	9.52	9.61	9.25	9.06	9.04	8.63	8.69	8.04	9.17	9.04	9.02	9.18
15	9.53	9.56	9.19	9.06	9.00	8.57	8.72	8.23	9.10	9.13	9.14	9.21
20	9.56	9.54	9.07	9.07	8.93	8.55	8.70	8.48	9.15	9.14	9.24	9.24
25	9.57	9.44	9.07	9.07	8.85	8.54	8.15	8.73	9.19	8.93	9.31	9.27
EOM	9.60	9.35	9.06	9.08	8.80	8.55	7.71	8.95	9.12	8.78	9.07	9.30

WTR YEAR 1979 HWL 7.66 MAY 1 LWL 9.63 NOV 2, 3 & 8

644400147151501. Local number, FD00200224ABBB1 51659.
LOCATION.--Lat 64°44'00", long 147°15'15", Hydrologic Unit 19030004, 50 ft (15 m) from southeast corner, junction of Laurence Road and Nelson Road near North Pole. Owner: U.S. Army Corps of Engineers.
AQUIFER.--Sand and gravel of Quaternary age.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in (0.10 m), depth 30 ft (9.14 m), cased to 30 ft (9.14 m).
DATUM.--Land-surface datum is 503.5 ft (153.5 m) National Geodetic Vertical Datum. Measuring point: top of casing 2.97 ft (0.91 m) above land-surface datum.
REMARKS.--U.S. Army Corps of Engineers named well P-251.
PERIOD OF RECORD.--June 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.99 ft (3.35 m) below land-surface datum, Aug. 14-16, 1979; lowest, 13.65 ft (4.16 m) below land-surface datum, Apr. 14, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET). WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.67	12.81	12.81	12.94	13.07	13.14	13.06	12.15	12.05	11.87	11.09	11.20
10	12.71	12.78	12.80	12.97	13.08	13.19	13.02	11.97	12.06	11.80	11.01	11.33
15	12.73	12.78	12.84	12.98	13.09	13.18	13.01	11.89	11.96	11.77	10.99	11.37
20	12.79	12.79	12.85	13.02	13.11	13.19	12.99	11.88	11.93	11.70	11.01	11.38
25	12.84	12.79	12.87	13.03	13.13	13.16	12.80	11.91	12.01	11.55	11.09	11.40
EOM	12.87	12.80	12.92	13.05	13.14	13.09	12.45	12.03	11.88	11.25	11.14	11.76

WTR YEAR 1979 HWL 10.99 AUG 14-16 LWL 13.19 MAR 10-12 & 16-20

YUKON ALASKA

FAIRBANKS NORTH-STAR BOROUGH--Continued

644528147131201. Local number, FD00200307ADBD1 51660.

LOCATION.--Lat 64°45'28", long 147°13'12"; Hydrologic Unit 19030004, 2 mi (3 km) northeast of intersection of Laurence Road and Nelson Road, near North Pole. Owner: U.S. Army Corps of Engineers.

AQUIFER.--Sand and gravel of Quarternary age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in (0.10 m), depth 31 ft (9.45 m), cased to 31 ft (9.45 m).

DATUM.--Land-surface datum is 494.2 ft (150.6 m) National Geodetic Vertical Datum. Measuring point: top of casing 2.91 ft (0.887 m) above land-surface datum.

REMARKS.--U.S. Army Corps of Engineers named well P-252.

PERIOD OF RECORD.--June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest measured water level, 9.59 ft (2.92 m) below land-surface datum, July 3 & 4, 1977 (revised); lowest, 13.04 ft (3.97 m) below land-surface datum, Oct. 1, 1976.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.06	12.05	11.66	11.46	11.41	11.47	11.53	10.59	9.88	10.09	9.96	11.62
10	12.09	12.04	11.62	11.44	11.42	11.48	11.54	10.16	9.98	10.07	10.09	11.92
15	12.11	11.99	11.58	11.44	11.43	11.49	11.72	9.95	9.97	10.09	10.27	12.07
20	12.11	11.86	11.52	11.38	11.44	11.50	11.73	9.87	9.97	10.11	10.56	12.15
25	12.11	11.77	11.50	11.39	11.45	11.51	11.63	9.86	9.99	9.99	10.87	12.25
EOM	12.09	11.70	11.47	11.40	11.46	11.52	11.15	9.88	10.05	9.95	11.26	12.35

WTR YEAR 1979 HWL 9.86 MAY 23-26 LWL 12.35 SEP 30

644944147402501. Local number, FC00100113BCCC1022 50006.

LOCATION.--Lat 64°49'44", long 147°40'25", Hydrologic Unit 19030004, at former building site 4005, Fort Wainwright. Owner: U.S. Army.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in (0.20 m), depth 118 ft (36.0 m), cased to 100 ft (30.5 m).

DATUM.--Altitude of land-surface datum is 440 ft (134 m). Measuring point: Top of casing 1.50 ft (0.46 m) above land-surface datum.

REMARKS.--Water level reflects seasonal changes in the Chena River 0.4 mi (0.6 km) to the north and the Tanana River 2.5 mi (4.0 km) to the south.

PERIOD OF RECORD.--August 1966 to June 1970, March 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.67 ft (1.12 m) above land-surface datum, Aug. 15, 1967, due to flooding; lowest water level measured, 16.60 ft (5.06 m) below land-surface datum, Mar. 20, 1965.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.44	15.00	15.00	15.07	14.88	14.95	15.19	13.27	13.58	13.32	12.99	13.48
10	14.47	15.04	15.01	15.11	14.89	14.97	15.21	12.97	13.63	13.16	13.00	13.50
15	14.50	15.06	15.02	15.13	14.91	15.00	15.25	13.13	13.15	13.17	13.04	13.53
20	14.71	15.00	15.04	14.95	14.92	15.03	15.27	13.33	13.15	13.19	13.30	13.57
25	14.80	14.99	15.05	14.96	14.93	15.06	15.10	13.59	13.19	13.22	13.40	13.61
EOM	14.92	14.98	15.05	14.92	14.94	15.15	13.39	13.77	13.30	13.01	13.45	13.64

WTR YEAR 1979 HWL 12.97 MAY 9 & 10 LWL 15.27 APR 20, 21 & 22

645429147383901. Local number, FB00100113DDDC1003 50172.

LOCATION.--Lat 64°54'29", long 147°38'39", Hydrologic Unit 19030004, Lot 5, Block A, McGrath Estates Subdivision. Owner: McGrath Estates Incorporated.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 4 in (0.10 m), depth 124.5 (38 m), casing information not available.

DATUM.--Altitude of land-surface datum is 710 ft (216 m). Measuring point: Top of casing 4.25 ft (1.29 m) above land-surface datum from 1977 to current year.

REMARKS.--Approximately 8.5 ft (2.6 m) of oil in casing (no corrections have been applied).

PERIOD OF RECORD.--December 1949 to June 1956, February 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, flowing over top of casing June 9-11, 1950; lowest measured, 2.67 ft (0.81 m) below land-surface datum, Mar. 26, 1979.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	1.66	MAR 26	2.67	JUN 1	1.85	AUG 4	2.15
DEC 11	2.05	APR 26	2.52	JUN 26	1.83	SEP 29	2.50
JAN 22	2.29						

YUKON ALASKA

FAIRBANKS NORTH-STAR BOROUGH--Continued

645442147461601. Local number, FB00100117DDAD1001 50176.
LOCATION.--Lat 64°54'38", long 147°46'45"; Hydrologic Unit 19030004, 1.4 mi (2.3 km) northwest of intersection of Farmers Loop Road and Grenac Road, near Fairbanks. Owner: U.S. Geological Survey.
AQUIFER.--Birch Creek schist of Precambrian age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), depth 565 ft (172.2 m), cased to 370 ft (112.8 m).
DATUM.--Land-surface datum is 1,282.92 ft (391.034 m) National Geodetic Vertical Datum (datum established by Corps of Engineers in 1958). Measuring point: Top of casing 1.98 ft (0.60 m) above land-surface datum.
REMARKS.--U.S. Army named well B-61.
PERIOD OF RECORD.--May 1975 to current year.
EXTRLMES FOR PERIOD OF RECORD.--Highest water level measured, 809.4 ft (246.8 m) NGVD, May 28, 1975; lowest measured, 792.52 ft (241.55 m) Sept. 18, 1979.

WATER LEVEL, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 2	794.79	JUN 1	793.89	AUG 4	793.64	SEP 14	792.70
DEC 22	794.84	JUN 28	792.88	SEP 5	793.45	SEP 18	792.52
MAR 28	793.75						

MCKINLEY PARK

634355148550501. Local number, FC01400704BDAB1002 50002.
LOCATION.--Lat 63°43'55", long 148°55'05", Hydrologic Unit 19030004, near McKinley Park Hotel. Owner: U.S. National Park Service.
AQUIFER.--Fractured schist of Precambrian age.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in (0.20 m), depth 307 ft (93.6 m) cased to 304 ft (92.7 m), perforated 150 to 199.5 ft (45.7 to 60.8 m).
DATUM.--Altitude of land-surface datum is 1,750 ft (533 m). Measuring point: Top of casing 2.50 ft (0.76 m) above land-surface datum.
REMARKS.--Measurements were made by National Park Service personnel.
PERIOD OF RECORD.--1965 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 89.26 ft (27.21 m) below land-surface datum, Oct. 4, 1969; lowest measured, 100.60 ft (30.66 m) below land-surface datum, June 22, 1974.

DEPTH BELOW LAND SURFACE (WATER LEVELS) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 23	97.09	FEB 27	97.84	APR 3	98.51	MAY 9	99.33	JUN 26	96.51	JUL 24	95.84
JAN 30	97.39	MAR 6	98.39	APR 10	98.15	MAY 15	99.35	JUL 3	96.35	JUL 31	95.70
FEB 6	97.39	MAR 14	98.19	APR 17	99.00	MAY 22	97.67	JUL 10	96.18	AUG 7	95.90
FEB 13	97.39	MAR 20	98.39	APR 24	99.14	JUN 12	97.16	JUL 17	95.93	AUG 14	96.04
FEB 20	97.39	MAR 28	98.42	MAY 2	99.00	JUN 19	96.77				

634359148545401. Local number, FC01400704ABCC1001 S0001.
LOCATION.--Lat 63°43'59", long 148°54'54", Hydrologic Unit 19030004, near McKinley Park Hotel. Owner: U.S. National Park Service.
AQUIFER.--Fractured schist of Precambrian age.
WELL CHARACTERISTICS.--Drilled unused water-table well. Diameter 8 in (0.20 m), depth 253 ft (77.1 m) cased to 204 ft (62.2 m).
DATUM.--Altitude of land-surface datum is 1,750 ft (533 m). Measuring point: Top of casing 2.50 ft (0.76 m) above land-surface datum.
REMARKS.--Water level at times affected by nearby pumping. Measurements were made by National Park Service personnel.
PERIOD OF RECORD.--1964 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 92.81 ft (28.29 m) below land-surface datum, July 2, 1968: lowest measured, 109.42 ft (33.35 m) below land-surface datum, Apr. 10, 1966.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 23	98.52	FEB 27	99.25	APR 3	99.91	MAY 9	100.48	JUN 26	98.91	JUL 24	102.10
JAN 30	98.54	MAR 6	99.27	APR 10	99.98	MAY 15	100.55	JUL 3	98.48	JUL 31	103.17
FEB 6	98.54	MAR 14	99.57	APR 17	100.15	MAY 22	100.56	JUL 10	99.36	AUG 7	103.00
FEB 13	98.54	MAR 20	99.73	APR 24	100.27	JUN 12	100.04	JUL 17	100.92	AUG 14	102.84
FEB 20	98.54	MAR 28	99.79	MAY 2	100.36	JUN 19	99.31				

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1979

SOUTH-CENTRAL ALASKA

SEWARD AREA WELL

LAT-I-TUDE	LONG-I-TUBE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	SAMPLE SOURCE	SAM-PLING CONDI-TION	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH OF WELL, TOTAL (FEET)
60 05 46	149 20 43	01	SD00100118BADB1001 11624	79-08-07	1735	1/1	2/8	82	23	78

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	DEPTH OF HOLE, TOTAL (FEET)	FLOW RATE, INSTAN-TANEOUS (GPM)	ARSENIC DIS-SOLVED (UG/L AS AS)
60 05 46	149 20 43	01	79-08-07	78	78	45	100	10	1

SELDOVIA AREA WELLS

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	SAMPLE TREAT-MENT	SAMPLE SOURCE	SAM-PLING CONDI-TION	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)
59 25 56	151 41 56	02	SC00901406ABAC2001 11450	79-01-16	1315	3/1	4/26	5/1	40	36
59 26 56	151 41 59	01	SC00801429CDDC1001 11401	79-01-16	1213	1	26	1	36	8.6

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	DEPTH OF HOLE, TOTAL (FEET)	FLOW RATE, INSTAN-TANEOUS (GPM)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
59 25 56	151 41 56	02	79-01-16	37	37	34	15	48	2.0	150	6.5	3.0
59 26 56	151 41 59	01	79-01-16	32	32	28	40	40	1.0	97	8.3	4.0

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
59 25 56	151 41 56	02	79-01-16	75	0	7.7	8.5	.1	15	92	.04
59 26 56	151 41 59	01	79-01-16	35	--	--	--	--	--	--	--

1/ WELL HEAD
2/ PUMPING
3/ RAW
4/ PUMP
5/ TESTING

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1979

SOUTH-CENTRAL ALASKA--Continued

KENAI AREA WELL

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	SAMPLE SOURCE	SAM-PLING CONDI-TION	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)
60 38 15	151 10 24	01	SB00601103ADAD1001 11623	79-01-29	1030	1/1	2/1	129	129	124

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	DEPTH OF HOLE, TOTAL (FEET)	FLOW RATE, INSTAN-TANEOUS (GPM)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	BICAR-BONATE (MG/L AS HCO3)	ARSENIC DIS-SOLVED (UG/L AS AS)
60 38 15	151 10 24	01	79-01-29	>4000	132	90	205	8.3	2.5	122	57

ANCHORAGE (INTERNATIONAL AIRPORT ROAD) SANITARY LANDFILL WELLS

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	SAMPLE SOURCE	SAM-PLING CONDI-TION	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)
61 10 02	149 55 98	01	SB01300436CCCC1038 02139	79-04-17	1150	1/1	--	4.2	17	17
				79-09-25	1300	1	--	4.3	17	17
61 10 05	149 54 48	01	SB01300436CDDB1032 02131	79-04-17	1305	1	--	2.1	18	18
				79-09-25	1415	1	--	1.6	18	18
61 10 13	149 55 08	01	SB01300436CCAA1036 02135	79-09-25	1550	1	2/1	24	46	46
61 10 17	149 55 52	01	SB01300435DACC1020 02137	79-04-17	1040	1	--	10	23	23
				79-09-25	0935	1	1	10	23	23

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	DEPTH OF HOLE, TOTAL (FEET)	FLOW RATE, INSTAN-TANEOUS (GPM)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
61 10 02	149 55 38	01	79-04-17	13	30	17	1.0	475	7.0	3.0	240	31
			79-09-25	13	40	17	1.0	430	6.5	4.5	230	25
61 10 05	149 54 48	01	79-04-17	13	25	18	1.0	445	7.0	1.5	210	0
			79-09-25	13	25	18	1.0	470	6.3	3.0	230	0
61 10 13	149 55 08	01	79-09-25	38	38	46	5.0	2850	6.1	3.0	960	0
61 10 17	149 55 52	01	79-04-17	15	30	23	1.0	72	5.6	2.5	26	13
			79-09-25	15	30	23	1.0	70	5.2	3.5	25	14

LAT-I-TUDE	LONG-I-TUBE	SEQ. NO.	DATE OF SAMPLE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
61 10 02	149 55 38	01	79-04-17	60	21	5.3	1.3	250	--	5.8	27	--
			79-09-25	59	20	5.9	1.2	250	0	33	6.2	.1
61 10 05	149 54 48	01	79-04-17	65	11	3.7	.8	290	0	15	5.8	--
			79-09-25	71	12	4.6	.9	300	0	23	4.2	.0
61 10 13	149 55 08	01	79-09-25	310	46	140	14	1690	--	10	180	.1
61 10 17	149 55 52	01	79-04-17	7.7	1.6	2.0	.4	16	--	13	2.0	--
			79-09-25	7.8	1.4	2.2	.5	14	0	18	1.8	.0

1/ WELL HEAD
2/ TESTING

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1979

SOUTH-CENTRAL ALASKA--Continued

ANCHORAGE (INTERNATIONAL AIRPORT ROAD) SANITARY LANDFILL WELLS--Continued

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
61 10 02	149 55 38	01	79-04-17	--	308	--	.00	4600	510	16
			79-09-25	32	293	285	.01	4300	460	9.9
61 10 05	149 54 48	01	79-04-17	--	277	--	.00	15000	1000	4.3
			79-09-25	39	287	304	.00	20	1100	3.3
61 10 13	149 55 08	01	79-09-25	12	1510	1710	.01	160000	8400	28
61 10 17	149 55 52	01	79-04-17	--	52	--	.34	920	60	1.2
			79-09-25	14	55	55	.26	840	60	1.4

ANCHORAGE (MERRILL FIELD) SANITARY LANDFILL WELLS

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	SAMPLE SOURCE	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)
61 12 23	149 50 39	01	SB01300320ABDD1033 02398	79-04-18	1150	1/1	--	89	91	91
				79-09-26	0930	1	--	89	91	91
61 12 23	149 50 39	02	SB01300320ABDD2033 02399	79-04-18	1240	1	35	2.4	35	35
				79-09-26	1505	1	35	3.5	35	35
61 12 43	149 50 07	01	SB01300316CCBC1006 02371	79-04-19	1020	1	--	91	95	95
				79-09-26	1225	1	--	91	95	95
61 12 43	149 50 07	02	SB01300316CCBC2006 02372	79-04-19	0915	1	70	68	70	70
				79-09-26	1115	1	70	68	70	70
61 12 43	149 50 07	03	SB01300316CCBC3006 02373	79-04-19	1130	1	23	8.2	17	17
				79-09-26	1325	1	23	7.6	17	17

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	DEPTH OF HOLE, TOTAL (FEET)	FLOW RATE, INSTAN-TANEOUS (GPM)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
61 12 23	149 50 39	01	79-04-18	91	30	91	10	305	8.0	3.5	120	0
			79-09-26	91	30	91	10	300	7.8	3.5	130	0
61 12 23	149 50 39	02	79-04-18	32	5	45	1.0	728	7.5	3.5	330	170
			79-09-26	32	5	45	1.0	750	7.2	6.0	360	78
61 12 43	149 50 07	01	79-04-19	95	35	95	7.0	330	7.1	3.5	97	0
			79-09-26	95	45	95	7.0	250	7.6	3.5	81	0
61 12 43	149 50 07	02	79-04-19	70	25	70	2.0	325	7.9	4.5	100	0
			79-09-26	70	45	70	2.5	245	7.5	4.5	80	0
61 12 43	149 50 07	03	79-04-19	13	30	19	5.0	3840	6.4	7.0	960	0
			79-09-26	13	30	19	5.0	4400	6.1	7.0	930	0

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
61 12 23	149 50 39	01	79-04-18	27	13	17	1.9	160	21	8.4	--	--
			79-09-26	29	14	18	1.9	180	29	8.6	.1	14
61 12 23	149 50 39	02	79-04-18	86	28	12	3.4	200	72	68	--	--
			79-09-26	95	31	18	3.4	350	94	78	.0	18
61 12 43	149 50 07	01	79-04-19	24	9.1	28	3.1	140	7.7	9.7	--	--
			79-09-26	20	7.6	24	2.4	200	5.3	3.9	.2	12
61 12 43	149 50 07	02	79-04-19	26	9.6	28	2.9	190	5.5	8.9	--	--
			79-09-26	20	7.4	23	2.4	190	6.9	3.3	.2	12
61 12 43	149 50 07	03	79-04-19	350	21	390	22	2020	13	400	--	--
			79-09-26	140	140	390	49	2860	25	460	.1	28

1/ WELL HEAD

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1979

SOUTH-CENTRAL ALASKA--Continued

ANCHORAGE (MERRILL FIELD) SANITARY LANDFILL WELLS--Continued

LATITUDE	LONGITUDE	SEQ. NO.	DATE OF SAMPLE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	ARSENIC DISSOLVED (UG/L AS AS)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
61 12 23	149 50 39	01	79-04-18	173	--	.00	25	40	90	1.7
			79-09-26	188	204	.01	23	130	100	1.0
61 12 23	149 50 39	02	79-04-18	454	--	.00	46	3100	1500	5.5
			79-09-26	505	517	.00	22	5600	1900	4.1
61 12 43	149 50 07	01	79-04-19	181	--	.01	48	2100	600	2.6
			79-09-26	155	177	.03	36	2200	450	1.2
61 12 43	149 50 07	02	79-04-19	179	--	.00	20	4000	580	3.2
			79-09-26	148	169	.01	29	2300	340	3.3
61 12 43	149 50 07	03	79-04-19	2390	--	.00	32	63000	21000	170
			79-09-26	2710	2740	.00	44	76000	19000	22

WILLOW AREA WELL

LATITUDE	LONGITUDE	SEQ. NO.	LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	SAMPLE SOURCE	SAMPLING CONDITION	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	DEPTH TO TOP OF SAMPLE INTERVAL (FT)
61 44 43	149 55 55	01	SB01980411DDDA1002 21445	78-10-20	1100	1/1	2/4	103	103	68

LATITUDE	LONGITUDE	SEQ. NO.	DATE OF SAMPLE	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	DEPTH OF HOLE, TOTAL (FEET)	FLOW RATE, INSTANTANEOUS (GPM)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
61 44 43	149 55 55	01	78-10-20	4320	123	21	207	6.5	2.0	120	0	38

LATITUDE	LONGITUDE	SEQ. NO.	DATE OF SAMPLE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
61 44 43	149 55 55	01	78-10-20	6.6	13	2.4	150	0	.0	3.5	19	.1

LATITUDE	LONGITUDE	SEQ. NO.	DATE OF SAMPLE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
61 44 43	149 55 55	01	78-10-20	21	177	179	.01	.02	1	100	1	0

LATITUDE	LONGITUDE	SEQ. NO.	DATE OF SAMPLE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
61 44 43	149 55 55	01	78-10-20	1	1400	1400	4	320	290

LATITUDE	LONGITUDE	SEQ. NO.	DATE OF SAMPLE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
61 44 43	149 55 55	01	78-10-20	.0	0	0	10

1/ WELL HEAD
2/ FLOWING

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1979

SOUTHWEST ALASKA

KING SALMON AREA WELLS

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	SAMPLE SOURCE	SAM-PLING CONDI-TION	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH OF WELL, TOTAL (FEET)
58 40 40	156 39 11	02	SC01704526ADAC2002 00162	79-06-13	1350	1/8	5/8	239	230	236
58 41 08	156 42 03	01	SC01704522CCAB1001 00174	79-06-13	1600	2/5	6/1	--	--	220
58 41 21	156 39 19	01	SC01704523DABB1006 00141	79-06-14	1555	3/1	1	--	94	97
58 41 40	156 40 05	01	SC01704523BACD1005 00039	79-06-14	1455	5	1	230	225	228
58 42 42	157 01 54	01	SC01704710CCCA1001 00163	79-06-14	1010	1	1	--	--	199
58 43 41	157 00 56	01	SC01704703DCAD1001 00164	79-06-04	1530	1	1	--	--	120
58 44 06	156 58 56	01	SC01704702ADAC1001 00165	79-06-05	2045	4/30	1	--	--	300
58 44 44	156 56 19	01	SC01604634CBAD1001 00166	79-06-15	1215	5	1	--	61	61

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	DEPTH OF HOLE, TOTAL (FEET)	FLOW RATE, INSTAN-TANEOUS (GPM)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)
58 40 40	156 39 11	02	79-06-13	236	226	5	240	--	180
58 41 08	156 42 03	01	79-06-13	--	--	5	220	E8.0	1100
58 41 21	156 39 19	01	79-06-14	97	94	E7	97	E150	120
58 41 40	156 40 05	01	79-06-14	--	--	5	315	--	280
58 42 42	157 01 54	01	79-06-14	--	--	1	199	--	245
58 43 41	157 00 56	01	79-06-04	--	--	<5	120	250	156
58 44 06	156 58 56	01	79-06-05	--	--	2	300	2.0	230
58 44 44	156 56 19	01	79-06-15	--	--	15	61	2.0	--

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	PH (UNITS)	TEMPER-ATURE (DEG C)	BICAR-BONATE (MG/L AS HCO3)	ARSENIC DIS-SOLVED (UG/L AS AS)
58 40 40	156 39 11	02	79-06-13	7.8	6.0	102	3
58 41 08	156 42 03	01	79-06-13	7.8	5.0	94	3
58 41 21	156 39 19	01	79-06-14	7.0	4.0	48	4
58 41 40	156 40 05	01	79-06-14	8.5	5.0	154	3
58 42 42	157 01 54	01	79-06-14	8.1	4.0	151	4
58 43 41	157 00 56	01	79-06-04	6.1	3.5	62	4
58 44 06	156 58 56	01	79-06-05	6.5	6.0	130	4
58 44 44	156 56 19	01	79-06-15	6.9	3.0	--	2

DILLINGHAM AREA WELLS

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	SAMPLE TREAT-MENT	SAMPLE SOURCE	SAM-PLING CONDI-TION	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)
59 00 28	158 32 05	01	SC01305636BDDD1001 00170	79-06-04	1600	--	4/30	5/8	--	42
59 02 26	158 28 00	01	SC01305521BACC1010 00167	79-06-27	1120	--	3/1	8	--	--
59 02 31	158 27 54	02	SC01305521BABD2006 00119	79-04-16	1700	7/1	--	8	--	99
				79-06-27	0900	1	1	6/1	--	99
59 02 32	158 27 25	02	SC01305521ABBD2001 00150	79-04-18	1100	1	8/28	8	84	54
59 02 42	158 29 01	01	SC01305517CDCA1003 00169	79-06-27	1640	--	30	8	--	35
59 02 48	158 30 23	01	SC01305518DDBA1001 00168	79-06-04	1700	--	30	8	--	--
59 03 01	158 34 08	01	SC01305614DBBB1005 00171	79-06-28	1017	--	30	1	--	25
59 03 24	158 34 16	01	SC01305614BAAD1001 00172	79-06-28	1130	--	30	8	--	35
59 16 08	158 37 55	01	SC01005636ACCA1002 00173	79-06-05	1445	--	30	8	--	--

1/ TANK
2/ FLOW LINE
3/ WELL HEAD
4/ PRESSURE TANK
5/ PUMPING
6/ TESTING
7/ RAW
8/ TAP AWAY FROM WELL
E ESTIMATED

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1979

SOUTHWEST ALASKA--Continued

DILLINGHAM AREA WELLS--Continued

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	DEPTH OF HOLE, TOTAL (FEET)	FLOW RATE, INSTANTANEOUS (GPM)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
59 00 20	158 32 35	01	79-06-04	47	--	42	E15	47	3.0	117	6.6	4.0
59 02 26	158 28 00	01	79-06-27	140	--	--	>3000	140	E200	700	7.8	4.0
59 02 31	158 27 54	02	79-04-16	115	115	99	>3000	119	E150	270	7.4	3.5
			79-06-27	115	115	99	E12	119	E150	240	--	3.0
59 02 32	158 27 25	02	79-04-18	85	85	75	>1440	91	--	142	6.0	--
59 02 42	158 29 31	01	79-06-27	42	--	35	E15	42	E3.0	82	6.5	7.0
59 02 48	158 30 23	01	79-06-04	87	--	--	>3000	87	E3.5	212	5.8	6.5
59 03 01	158 34 08	01	79-06-28	33	--	25	E15	35	1.0	130	6.4	12.0
59 03 24	158 34 16	01	79-06-28	41	--	35	>3000	41	E5.0	65	6.0	9.0
59 16 00	158 37 55	01	79-06-05	57	--	--	E10	57	E3.0	60	6.3	8.5

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)
59 00 20	158 32 35	01	79-06-04	--	--	--	--	--	--	78	--	--
59 02 26	158 28 00	01	79-06-27	--	--	--	--	--	--	235	--	--
59 02 31	158 27 54	02	79-04-16	110	6	24	11	11	8.2	121	0	6.7
			79-06-27	--	--	--	--	--	--	--	--	--
59 02 32	158 27 25	02	79-04-18	56	1	14	5.0	8.6	1.5	67	0	5.8
59 02 42	158 29 31	01	79-06-27	--	--	--	--	--	--	42	--	--
59 02 48	158 30 23	01	79-06-04	--	--	--	--	--	--	132	--	--
59 03 01	158 34 08	01	79-06-28	--	--	--	--	--	--	76	--	--
59 03 24	158 34 16	01	79-06-28	--	--	--	--	--	--	27	--	--
59 16 00	158 37 55	01	79-06-05	--	--	--	--	--	--	23	--	--

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)
59 00 20	158 32 35	01	79-06-04	--	--	--	--	--	--	--	--	--
59 02 26	158 28 00	01	79-06-27	--	--	--	--	--	--	--	21	--
59 02 31	158 27 54	02	79-04-16	21	.2	30	164	175	.16	1.3	45	0
			79-06-27	--	--	--	--	--	--	--	50	30
59 02 32	158 27 25	02	79-04-18	3,7	.1	20	82	95	.58	.03	0	0
59 02 42	158 29 31	01	79-06-27	--	--	--	--	--	--	--	0	--
59 02 48	158 30 23	01	79-06-04	--	--	--	--	--	--	--	--	--
59 03 01	158 34 08	01	79-06-28	--	--	--	--	--	--	--	1	--
59 03 24	158 34 16	01	79-06-28	--	--	--	--	--	--	--	1	--
59 16 00	158 37 55	01	79-06-05	--	--	--	--	--	--	--	3	--

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)
59 00 20	158 32 35	01	79-06-04	--	--	--	--	--	--
59 02 26	158 28 00	01	79-06-27	--	--	--	--	--	--
59 02 31	158 27 54	02	79-04-16	5	0	0	870	63	1200
			79-06-27	<1	0	2	550	0	1200
59 02 32	158 27 25	02	79-04-18	2	0	4	50	10	170
59 02 42	158 29 31	01	79-06-27	--	--	--	--	--	--
59 02 48	158 30 23	01	79-06-04	--	--	--	--	--	--
59 03 01	158 34 08	01	79-06-28	--	--	--	--	--	--
59 03 24	158 34 16	01	79-06-28	--	--	--	--	--	--
59 16 00	158 37 55	01	79-06-05	--	--	--	--	--	--

E ESTIMATED

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1979

SOUTHWEST ALASKA--Continued

DILLINGHAM AREA WELLS--Continued

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
59 00 28	158 32 35	01	79-06-04	--	--	--	--
59 02 26	158 28 00	01	79-06-27	--	--	--	--
59 02 31	158 27 54	02	79-04-16	.1	0	0	20
			79-06-27	.0	0	0	20
59 02 32	158 27 25	02	79-04-18	.1	0	0	80
59 02 42	158 29 31	01	79-06-27	--	--	--	--
59 02 48	158 30 23	01	79-06-04	--	--	--	--
59 03 01	158 34 08	01	79-06-28	--	--	--	--
59 03 24	158 34 16	01	79-06-28	--	--	--	--
59 16 08	158 37 55	01	79-06-05	--	--	--	--

ST PAUL ISLAND WELLS

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	DEPTH OF WELL, TOTAL (FEET)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	DEPTH OF HOLE, TOTAL (FEET)	FLOW RATE, INSTAN-TANEOUS (GPM)	HARD-NESS (MG/L AS CACO3)
57 08 56	170 15 38	01	SC03513118CACC2001 80193	79-08-06	0935	92	30	--	100	54
57 09 08	170 14 41	01	SC03513118ADDC1002 80194	79-08-06	1050	36	80	36	22	53

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
57 08 56	170 15 38	01	79-08-06	0	11	6.4	42	4.4	12	55	.2	28
57 09 08	170 14 41	01	79-08-06	11	9.0	7.3	42	3.6	12	64	.1	28

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
57 08 56	170 15 38	01	79-08-06	196	195	.33	.02	20	3
57 09 08	170 14 41	01	79-08-06	194	193	.45	.01	10	3

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1979

YUKON ALASKA

FAIRBANKS AREA WELLS

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SAMPLE SOURCE	SAM-PLING CONDI-TION	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)
64 42 35	147 09 00	01	FD00200328DBDB1001 52087	79-08-30	1500	11.80	1/30	--	26	26
64 45 30	147 18 39	01	FB00200210ADBA1001 52086	79-08-30	1330	--	30	--	28	28
64 46 20	148 01 40	01	FC00200206BDAC1004 51936	78-11-27	1600	--	30	--	255	255
64 46 31	148 02 00	01	FC00200206BABC1005 51938	78-12-08	1430	--	30	--	392	392
64 46 34	148 01 42	01	FC00200206BAAD1006 51939	78-12-08	1630	--	30	--	314	314
64 46 35	148 01 30	01	FC00200206ABBD1001 51391	78-11-20	1500	135.70	30	--	205	205
64 47 02	147 59 07	01	FC00100232DBBC1006 51948	79-02-17	1430	--	--	--	30	30
64 47 08	148 01 00	01	FC00100231ADCD1004 52077	79-08-08	1930	240.10	30	--	350	350
64 47 13	147 58 10	01	FC00100233BCAC1014 51832	79-01-24	1710	--	30	--	--	--
64 47 14	147 58 34	01	FC00100233BCBC2003 51771	79-01-18	1905	--	30	--	270	270
64 47 19	147 58 26	01	FC00100233BBCD1008 51772	79-01-18	1600	--	30	--	--	--
64 47 23	147 58 03	01	FC00100233BACB1011 51789	79-01-19	1540	--	30	--	420	420
64 47 25	147 58 29	01	FC00100233BBBD1013 51792	79-01-24	1655	--	30	--	--	--
64 47 28	147 57 51	01	FC00100233BAAB1007 51769	79-01-09	1530	--	30	--	450	450
64 47 28	147 58 00	01	FC00100233BABB2010 51774	79-01-18	1745	--	30	--	450	450
64 47 29	147 58 40	01	FC00100232AAAB1005 51942	78-12-30	2000	--	30	--	240	240
64 47 30	147 57 30	01	FC00100233BAAA1012 51790	79-01-09	1600	--	30	--	--	--
64 47 30	147 57 45	01	FC00100233BAAB2006 51770	79-01-09	1630	--	30	--	420	420
64 47 32	147 58 40	01	FC00100229DDDC1013 51822	79-01-18	1530	--	30	--	360	360
64 47 36	148 00 27	01	FC00100229CCCA1019 51833	79-01-11	1700	--	30	--	--	290
64 47 38	147 58 40	01	FC00100229DDAD1014 51823	79-01-11	1600	--	30	--	250	250
64 47 39	147 57 02	01	FC00100228DCBC1005 51776	79-01-11	1630	--	30	--	280	280
64 47 39	147 57 40	01	FC00100228CDAC1004 51775	79-01-09	1700	--	30	--	250	250
64 47 40	147 58 09	01	FC00100228CDBC1012 52078	79-08-17	1230	143.40	30	--	270	270
64 47 42	147 58 56	01	FC00100229DDBA1022 51937	78-12-01	1530	--	--	--	--	--
64 47 42	147 59 49	01	FC00100229CDAB1024 51943	79-01-04	1630	--	30	--	360	360
64 47 42	148 00 12	01	FC00100229CCAA1006 51570	78-11-13	1530	--	30	4/8	372	372
64 47 44	147 58 49	01	FC00100229DADC1016 51827	79-01-18	1840	--	30	--	220	220
64 47 46	147 59 10	01	FC00100229DBDD1025 51954	79-04-07	1140	--	--	--	375	375
64 47 54	148 01 13	01	FC00100230DBBB1003 51940	78-12-21	1430	--	30	--	--	--
64 47 56	147 59 42	01	FC00100229CAAA1023 51941	78-12-26	1630	--	30	--	--	--
64 48 06	147 59 50	01	FC00100229BDAC1018 51831	79-01-19	1725	--	30	--	--	--
64 48 08	147 59 43	01	FC00100229BDAA1021 51933	78-10-30	1430	--	30	8	220	220
64 48 22	148 00 20	01	FC00100220CCCD1013 51885	79-02-00	--	--	30	--	--	--
64 48 25	148 00 30	01	FC00100220CCCA1002 51403	79-02-19	1830	--	30	--	220	220
64 48 39	148 00 30	01	FC00100220CBCA1008 51799	79-06-06	1500	--	--	--	340	340
64 48 40	148 00 10	01	FC00100220CBDA1010 51848	79-01-24	1620	--	30	--	200	200
64 48 42	148 00 09	01	FC00100220CABC1009 51800	79-01-19	1700	--	30	--	225	225
64 49 02	147 59 36	01	FC00100220ABCC1004 51461	78-11-03	1430	--	30	8	520	520
64 49 16	147 53 24	01	FC00100214DCDC1006 51884	79-02-19	1800	--	2/8	--	--	--
64 49 22	147 52 59	01	FC00100214DDBC1005 51883	79-02-00	--	--	30	--	--	--
64 49 26	147 52 35	01	FC00100214DDAA1007 51897	79-01-30	1520	--	30	--	--	--
64 49 28	147 53 03	01	FC00100214DBBC1009 52065	79-07-13	1430	--	30	--	10	10
64 49 58	147 56 10	01	FC00100215BBDA1007 51934	78-11-06	1530	146.80	30	--	--	--
64 50 25	147 54 12	01	FC00100211CBDB1003 51793	79-04-21	1710	--	--	--	--	--
64 50 29	147 54 29	01	FC00100211CBBB1004 51855	79-01-19	1640	--	30	--	--	--
64 52 47	147 49 49	01	FB00100130CDDB1029 51950	79-01-11	1900	--	30	--	--	--
64 52 50	147 37 00	01	FA00100130DCAD1036 52042	79-06-06	1400	--	30	--	195	195
64 52 51	147 35 11	01	FA00100129DCBD1014 52076	79-08-13	1930	--	3/1	--	189	189
64 52 44	147 36 58	01	FA00100130DCDD1029 52006	79-05-10	1200	56.70	--	--	160	160
64 52 57	147 36 25	01	FA00100129CBCD1011 52057	79-06-23	1600	--	30	--	--	--
64 52 59	147 35 17	01	FA00100129DBCA1012 52050	79-07-23	1630	--	30	--	91	91
64 53 02	147 35 26	01	FA00100129CADA1004 51430	79-08-13	1830	--	30	--	80	80
64 53 05	147 35 20	01	FA00100129DBBB1013 52070	79-07-20	1500	--	30	--	175	175
64 53 07	147 34 17	01	FA00100128CBBB1004 52071	79-07-28	1400	--	30	--	--	--
64 53 09	147 37 21	01	FA00100130ACCC1032 52014	79-05-23	1530	--	30	--	225	225
64 53 09	147 51 01	01	FB00100225ADCD1007 51989	79-04-20	1240	--	30	--	240	240
64 53 10	147 37 05	01	FA00100130ACDC1035 52043	79-06-06	1300	--	30	--	180	180
64 53 10	147 51 27	01	FB00100225ACDC1004 51963	79-04-06	1740	164.90	30	--	240	240
64 53 12	147 50 50	01	FB00100225ADDA1006 51988	79-04-21	1550	149.00	30	--	263	263

1/ PRESSURE TANK
2/ TANK
3/ WELL HEAD
4/ PUMPING

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1979

YUKON ALASKA--Continued

FAIRBANKS AREA WELLS--Continued

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	DEPTH OF HOLE, TOTAL (FEET)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
64 42 35	147 09 00	01	79-08-30	--	26	375	7.2	9.0	190	24	57	11
64 45 30	147 18 09	01	79-08-30	--	28	350	7.2	10.0	170	17	51	11
64 46 20	148 01 40	01	78-11-27	210	255	750	7.3	14.0	380	67	81	42
64 46 31	148 02 08	01	78-12-08	207	392	1500	6.4	5.0	600	190	110	79
64 46 34	148 01 42	01	78-12-08	274	314	800	6.8	7.0	590	260	140	58
64 46 35	148 01 00	01	78-11-20	105	205	1500	6.7	9.0	420	64	78	54
64 47 02	147 59 07	01	79-02-17	--	30	425	6.8	8.0	210	8	64	11
64 47 08	148 01 00	01	79-08-08	--	350	750	7.0	8.0	460	78	80	64
64 47 13	147 58 18	01	79-01-24	--	--	--	--	--	460	--	110	46
64 47 14	147 58 04	01	79-01-10	295	270	--	--	--	1100	--	310	84
64 47 19	147 58 26	01	79-01-18	--	--	--	--	--	1000	--	280	78
64 47 23	147 58 03	01	79-01-19	395	420	--	--	--	960	--	240	88
64 47 25	147 58 29	01	79-01-24	--	--	--	--	--	800	--	190	79
64 47 28	147 57 51	01	79-01-09	430	450	--	--	--	1000	--	280	83
64 47 28	147 58 00	01	79-01-18	--	450	--	--	--	670	--	170	60
64 47 29	147 58 48	01	78-12-30	201	240	650	7.0	5.0	360	49	110	21
64 47 30	147 57 38	01	79-01-09	--	--	--	--	--	1200	--	330	92
64 47 30	147 57 45	01	79-01-09	335	420	--	--	--	1100	--	320	77
64 47 32	147 58 48	01	79-01-10	330	360	--	--	--	330	--	77	33
64 47 36	148 00 27	01	79-01-11	275	--	--	--	--	160	--	29	22
64 47 38	147 58 40	01	79-01-11	--	250	--	--	--	440	--	130	29
64 47 39	147 57 52	01	79-01-11	238	280	--	--	--	850	--	250	55
64 47 39	147 57 48	01	79-01-09	195	250	--	--	--	1300	--	350	110
64 47 40	147 58 09	01	79-08-17	203	270	1722	6.9	1.0	1000	270	240	98
64 47 42	147 58 56	01	78-12-01	--	--	630	6.8	6.0	310	66	87	23
64 47 42	147 59 49	01	79-01-04	215	360	700	7.2	4.0	330	110	72	37
64 47 42	148 00 12	01	78-11-13	245	372	610	7.4	7.0	300	87	57	38
64 47 44	147 58 49	01	79-01-18	198	220	--	--	--	310	--	84	25
64 47 46	147 59 18	01	79-04-07	289	375	--	6.8	7.0	750	430	170	80
64 47 54	148 01 13	01	78-12-21	--	--	300	7.4	13.0	170	15	27	25
64 47 56	147 59 02	01	78-12-26	--	--	800	7.3	10.0	360	20	67	46
64 48 06	147 59 50	01	79-01-19	--	--	--	--	--	220	--	50	22
64 48 08	147 59 43	01	78-10-30	--	220	425	7.4	7.0	190	25	56	13
64 48 22	148 00 28	01	79-02-08	--	--	--	--	--	140	--	41	9.3
64 48 25	148 00 00	01	79-02-19	215	220	--	--	--	72	--	13	9.7
64 48 39	148 00 00	01	79-06-06	215	340	--	--	--	1400	--	310	150
64 48 40	148 00 18	01	79-01-24	150	200	--	--	--	82	--	23	5.9
64 48 42	148 00 09	01	79-01-19	204	225	--	--	--	83	--	15	11
64 49 02	147 59 36	01	78-11-03	297	520	2250	7.0	6.0	1200	850	260	140
64 49 16	147 53 24	01	79-02-19	--	--	--	--	--	160	--	43	12
64 49 22	147 52 59	01	79-02-08	--	--	--	--	--	180	--	51	12
64 49 26	147 52 05	01	79-01-30	--	--	--	--	--	150	--	42	11
64 49 28	147 53 33	01	79-07-13	--	18	614	6.6	9.0	280	0	82	19
64 49 58	147 56 10	01	78-11-06	--	220	330	7.0	5.0	160	30	40	14
64 50 25	147 54 12	01	79-04-21	--	--	--	--	--	110	--	26	11
64 50 29	147 54 29	01	79-01-19	--	--	--	--	--	780	--	180	80
64 52 47	147 49 09	01	79-01-11	--	--	1300	6.8	7.0	540	110	120	58
64 52 50	147 37 00	01	79-06-06	173	195	655	7.1	9.0	330	110	78	34
64 52 51	147 35 21	01	79-08-13	--	180	850	7.1	10.0	490	120	120	47
64 52 44	147 36 58	01	79-05-10	--	160	780	7.4	11.0	340	29	97	24
64 52 57	147 36 25	01	79-06-23	--	--	638	6.6	7.5	340	48	83	31
64 52 59	147 35 27	01	79-07-23	--	91	850	6.8	6.0	490	150	120	45
64 53 02	147 35 26	01	79-06-13	61	80	850	6.8	12.0	530	4	120	55
64 53 05	147 35 20	01	79-07-20	--	175	525	7.3	8.0	300	42	74	29
64 53 07	147 34 17	01	79-07-20	--	--	1000	6.8	8.0	530	59	130	51
64 53 09	147 37 21	01	79-05-23	--	225	874	6.7	7.0	420	66	110	35
64 53 09	147 51 01	01	79-04-20	--	240	450	6.6	5.0	190	19	51	15
64 53 10	147 37 05	01	79-06-06	--	180	1290	--	8.0	650	200	180	48
64 53 10	147 51 27	01	79-04-06	190	240	220	6.6	11.0	120	0	30	11
64 53 12	147 50 50	01	79-04-21	227	263	680	6.8	10.0	320	13	87	24

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1979

YUKON ALASKA--Continued

FAIRBANKS AREA WELLS--Continued

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
64 42 35	147 09 00	01	79-08-30	--	--	200	--	--	--	--	--	--
64 45 30	147 18 39	01	79-08-30	--	--	190	--	--	--	--	--	--
64 46 20	148 01 40	01	78-11-27	--	--	400	--	--	--	--	--	--
64 46 31	148 02 08	01	78-12-08	--	--	500	--	--	--	--	--	--
64 46 34	148 01 42	01	78-12-08	--	--	400	--	--	--	--	--	--
64 46 35	148 01 30	01	78-11-20	--	--	430	--	--	--	--	--	--
64 47 02	147 59 37	01	79-02-17	--	--	240	--	--	--	--	--	--
64 47 08	148 01 00	01	79-08-08	--	--	470	--	--	--	--	--	--
64 47 13	147 58 18	01	79-01-24	--	--	--	--	--	--	--	--	--
64 47 14	147 58 34	01	79-01-18	--	--	--	--	--	--	--	--	--
64 47 19	147 58 26	01	79-01-18	--	--	--	--	--	--	--	--	--
64 47 23	147 58 03	01	79-01-19	--	--	--	--	--	--	--	--	--
64 47 25	147 58 29	01	79-01-24	--	--	--	--	--	--	--	--	--
64 47 28	147 57 51	01	79-01-09	--	--	--	--	--	--	--	--	--
64 47 28	147 58 00	01	79-01-18	--	--	--	--	--	--	--	--	--
64 47 29	147 58 48	01	78-12-30	--	--	380	--	--	--	--	--	--
64 47 30	147 57 38	01	79-01-09	--	--	--	--	--	--	--	--	--
64 47 30	147 57 45	01	79-01-09	--	--	--	--	--	--	--	--	--
64 47 32	147 58 48	01	79-01-18	--	--	--	--	--	--	--	--	--
64 47 36	148 00 27	01	79-01-11	--	--	--	--	--	--	--	--	--
64 47 38	147 58 40	01	79-01-11	--	--	--	--	--	--	--	--	--
64 47 39	147 57 32	01	79-01-11	--	--	--	--	--	--	--	--	--
64 47 39	147 57 48	01	79-01-09	--	--	--	--	--	--	--	--	--
64 47 40	147 58 09	01	79-08-17	--	--	890	--	--	--	--	--	--
64 47 42	147 58 56	01	78-12-01	--	--	300	--	--	--	--	--	--
64 47 42	147 59 49	01	79-01-04	--	--	270	--	--	--	--	--	--
64 47 42	148 00 12	01	78-11-13	--	--	260	--	--	--	--	--	--
64 47 44	147 58 49	01	79-01-18	--	--	--	--	--	--	--	--	--
64 47 46	147 59 10	01	79-04-07	--	--	400	--	--	--	--	--	--
64 47 54	148 01 13	01	78-12-21	--	--	190	--	--	--	--	--	--
64 47 56	147 59 42	01	78-12-26	--	--	410	--	--	--	--	--	--
64 48 06	147 59 50	01	79-01-19	--	--	--	--	--	--	--	--	--
64 48 08	147 59 43	01	78-10-30	--	--	205	--	--	--	--	--	--
64 48 22	148 00 28	01	79-02-00	--	--	--	--	--	--	--	--	--
64 48 25	148 00 30	01	79-02-19	--	--	--	--	--	--	--	--	--
64 48 39	148 00 30	01	79-06-06	--	--	--	--	--	--	--	--	--
64 48 40	148 00 18	01	79-01-24	--	--	--	--	--	--	--	--	--
64 48 42	148 00 09	01	79-01-19	--	--	--	--	--	--	--	--	--
64 49 02	147 59 36	01	78-11-03	14	4.8	460	900	1.2	.2	12	1690	1560
64 49 16	147 53 14	01	79-02-19	--	--	--	--	--	--	--	--	--
64 49 22	147 52 59	01	79-02-00	--	--	--	--	--	--	--	--	--
64 49 26	147 52 35	01	79-01-30	--	--	--	--	--	--	--	--	--
64 49 28	147 53 33	01	79-07-13	--	--	376	--	--	--	--	--	--
64 49 58	147 56 10	01	78-11-06	--	--	155	--	--	--	--	--	--
64 50 25	147 54 12	01	79-04-21	--	--	--	--	--	--	--	--	--
64 50 29	147 54 29	01	79-01-19	--	--	--	--	--	--	--	--	--
64 52 47	147 49 49	01	79-01-11	--	--	520	--	--	--	--	--	--
64 52 50	147 37 00	01	79-06-06	--	--	280	--	--	--	--	--	--
64 52 51	147 35 11	01	79-08-13	--	--	456	--	--	--	--	--	--
64 52 44	147 36 58	01	79-05-10	--	--	380	--	--	--	--	--	--
64 52 57	147 36 15	01	79-06-23	--	--	350	--	--	--	--	--	--
64 52 59	147 35 17	01	79-07-23	--	--	410	--	--	--	--	--	--
64 53 02	147 35 26	01	79-08-13	--	--	636	--	--	--	--	--	--
64 53 05	147 35 20	01	79-07-28	--	--	320	--	--	--	--	--	--
64 53 07	147 34 17	01	79-07-28	--	--	580	--	--	--	--	--	--
64 53 09	147 37 21	01	79-05-23	--	--	430	--	--	--	--	--	--
64 53 09	147 51 01	01	79-04-20	--	--	208	--	--	--	--	--	--
64 53 10	147 37 05	01	79-06-06	--	--	540	--	--	--	--	--	--
64 53 10	147 51 27	01	79-04-06	--	--	150	--	--	--	--	--	--
64 53 12	147 50 50	01	79-04-21	--	--	370	--	--	--	--	--	--

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1979

YUKON ALASKA--Continued

FAIRBANKS AREA WELLS--Continued

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	SELE-NIUM, TOTAL (UG/L AS SE)
64 42 35	147 09 00	01	79-08-30	--	--	2	--	460	--	--	--
64 45 30	147 18 39	01	79-08-30	.00	--	1	--	150	--	--	--
64 46 20	148 01 40	01	78-11-27	.33	--	0	--	220	--	--	--
64 46 31	148 02 08	01	78-12-08	.13	--	0	--	1600	--	--	0
64 46 34	148 01 42	01	78-12-08	.19	--	1	--	1100	--	--	0
64 46 35	148 01 30	01	78-11-20	2.1	--	0	--	900	--	--	--
64 47 02	147 59 37	01	79-02-17	.01	--	5	--	8500	--	--	--
64 47 08	148 01 00	01	79-08-08	.38	--	17	--	4800	--	--	--
64 47 13	147 58 18	01	79-01-24	--	--	--	--	--	--	--	--
64 47 14	147 58 34	01	79-01-18	--	--	--	--	--	--	--	--
64 47 19	147 58 26	01	79-01-18	--	--	--	--	--	--	--	--
64 47 23	147 58 03	01	79-01-19	--	--	--	--	--	--	--	--
64 47 25	147 58 29	01	79-01-24	--	--	--	--	--	--	--	--
64 47 28	147 57 51	01	79-01-09	--	--	--	--	--	--	--	--
64 47 28	147 58 00	01	79-01-18	--	--	--	--	--	--	--	--
64 47 29	147 58 48	01	78-12-30	.55	--	0	--	690	--	--	1
64 47 30	147 57 38	01	79-01-09	--	--	--	--	--	--	--	--
64 47 30	147 57 45	01	79-01-09	--	--	--	--	--	--	--	--
64 47 32	147 58 48	01	79-01-18	--	--	--	--	--	--	--	--
64 47 36	148 00 27	01	79-01-11	--	--	--	--	--	--	--	--
64 47 38	147 58 40	01	79-01-11	--	--	--	--	--	--	--	--
64 47 39	147 57 32	01	79-01-11	--	--	--	--	--	--	--	--
64 47 39	147 57 48	01	79-01-09	--	--	--	--	--	--	--	--
64 47 40	147 58 09	01	79-08-17	26	--	1	--	4500	--	--	--
64 47 42	147 58 56	01	78-12-01	2.9	--	0	--	--	--	--	--
64 47 42	147 59 49	01	79-01-04	1.1	--	0	--	30	--	--	1
64 47 42	148 00 12	01	78-11-13	.68	--	0	--	--	--	--	--
64 47 44	147 58 49	01	79-01-18	--	--	--	--	--	--	--	--
64 47 46	147 59 10	01	79-04-07	.48	--	1	--	90	--	--	--
64 47 54	148 01 13	01	78-12-21	.57	--	0	--	40	--	--	0
64 47 56	147 59 42	01	78-12-26	1.4	--	0	--	--	--	--	5
64 48 06	147 59 50	01	79-01-19	--	--	--	--	--	--	--	--
64 48 08	147 59 43	01	78-10-30	1.1	--	0	--	560	--	--	--
64 48 22	148 00 28	01	79-02-00	--	--	--	--	--	--	--	--
64 48 25	148 00 30	01	79-02-19	--	--	--	--	--	--	--	--
64 48 39	148 00 30	01	79-06-06	--	--	1	0	--	--	--	--
64 48 40	148 00 18	01	79-01-24	--	--	0	--	--	--	--	--
64 48 42	148 00 09	01	79-01-19	--	--	--	--	--	--	--	--
64 49 02	147 59 36	01	78-11-03	--	.05	0	--	--	320	8	--
64 49 16	147 53 14	01	79-02-19	--	--	--	--	--	--	--	--
64 49 22	147 52 59	01	79-02-00	--	--	--	--	--	--	--	--
64 49 26	147 52 35	01	79-01-30	--	--	--	--	--	--	--	--
64 49 28	147 53 33	01	79-07-13	--	--	10	--	9000	--	--	--
64 49 58	147 56 10	01	78-11-06	.12	--	0	--	2500	--	--	--
64 50 25	147 54 12	01	79-04-21	--	--	--	--	--	--	--	--
64 50 29	147 54 29	01	79-01-19	--	--	--	--	--	--	--	--
64 52 47	147 49 49	01	79-01-11	3.8	--	0	--	150	--	--	--
64 52 50	147 37 00	01	79-06-06	.91	--	2	2	840	--	--	--
64 52 51	147 35 11	01	79-08-13	--	--	27	--	300	--	--	--
64 52 44	147 36 58	01	79-05-10	3.9	--	0	--	--	--	--	--
64 52 57	147 36 15	01	79-06-23	5.6	--	0	0	--	--	--	--
64 52 59	147 35 17	01	79-07-23	.04	--	1	--	900	--	--	--
64 53 02	147 35 26	01	79-08-13	--	--	36	--	10000	--	--	--
64 53 05	147 35 20	01	79-07-28	2.0	--	1	--	--	--	--	--
64 53 07	147 34 17	01	79-07-28	11	--	1	--	480	--	--	--
64 53 09	147 37 21	01	79-05-23	1.8	--	0	0	--	--	--	--
64 53 09	147 51 01	01	79-04-20	1.8	--	22	--	460	--	--	--
64 53 10	147 37 05	01	79-06-06	23	--	1	1	--	--	--	--
64 53 10	147 51 27	01	79-04-06	1.4	--	540	540	100	--	--	--
64 53 12	147 50 50	01	79-04-21	3.6	--	27	--	50	--	--	--

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1979

YUKON ALASKA--Continued

FAIRBANKS AREA WELLS--Continued

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SAMPLE SOURCE	SAM-PLING CONDI-TION	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)
64 53 13	147 37 12	01	FA00100130ACBD2008 52056	79-07-28	1930	--	1/30	--	--	--
64 53 13	147 37 39	01	FA00100130BDDB1030 52008	79-05-18	1400	--	--	--	--	--
64 53 13	147 47 43	01	FB00100129BDDA1035 51854	79-01-30	1100	--	30	--	404	404
64 53 13	147 51 40	01	FB00100225ACBC1008 52007	79-04-08	1800	--	30	--	275	275
64 53 15	147 35 59	01	FA00100129BCAD1002 50142	79-07-28	1600	--	30	--	--	--
64 53 15	147 36 46	01	FA00100130ADBD1023 51729	79-05-23	1700	36.72	--	--	130	130
64 53 23	147 38 05	01	FA00100130BBDC1016 51716	79-06-28	1830	--	30	--	240	240
64 53 25	147 50 54	01	FB00100225AADB1005 51964	79-04-10	1845	--	--	--	--	--
64 53 27	147 36 55	01	FA00100130AACB2003 52005	79-05-10	1430	--	30	--	140	140
64 53 28	147 37 26	01	FA00100130ABBC1031 52009	79-05-18	1600	--	30	--	--	--
64 53 29	147 37 00	01	FA00100130ABAD1033 52015	79-05-23	1430	--	30	--	156	156
64 53 32	147 35 25	01	FA00100129BAAA1006 51441	79-06-25	1500	160.30	30	--	220	220
64 53 39	147 36 41	01	FA00100119DDCA2022 51645	79-08-23	1300	--	30	--	210	210
64 54 00	147 40 36	01	FB00100123DAAA1005 51935	78-11-08	1000	--	30	2/8	390	390
64 54 15	147 36 29	01	FA00100119AADD1042 52089	79-09-26	1030	62.95	30	--	100	100
64 54 33	147 22 45	01	FA00100217DCDA1001 52079	79-07-28	1300	--	30	--	422	422
64 54 47	147 55 49	01	FB00100215CAAD1009 52085	79-08-24	1400	27.00	30	--	30	30
64 55 46	148 01 35	01	FB00100207ACDB1011 52052	79-06-28	2100	--	30	--	225	225

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	DEPTH OF HOLE, TOTAL (FEET)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
64 53 13	147 37 12	01	79-07-28	--	--	925	6.8	8.0	520	93	140	41
64 53 13	147 37 39	01	79-05-18	--	--	1248	6.4	7.0	610	96	130	70
64 53 13	147 47 43	01	79-01-30	344	404	--	7.1	5.0	450	130	75	64
64 53 13	147 51 40	01	79-04-08	--	275	440	6.8	9.0	360	170	94	30
64 53 15	147 35 59	01	79-07-28	--	--	750	6.4	7.5	430	120	96	46
64 53 15	147 36 46	01	79-05-23	--	130	1560	6.2	9.5	780	210	190	75
64 53 23	147 38 05	01	79-06-28	217	240	1450	6.9	7.5	630	230	160	57
64 53 25	147 50 54	01	79-04-10	--	--	--	6.5	8.0	210	11	57	16
64 53 27	147 36 55	01	79-05-10	--	140	1456	6.4	7.0	720	280	160	77
64 53 28	147 37 26	01	79-05-18	--	--	936	6.8	8.0	490	91	120	45
64 53 29	147 37 00	01	79-05-23	--	156	1144	6.8	10.0	640	110	140	70
64 53 32	147 35 25	01	79-06-25	--	220	610	6.9	7.5	330	5	94	24
64 53 39	147 36 41	01	79-08-23	173	210	475	7.4	5.0	270	0	64	26
64 54 00	147 40 36	01	78-11-08	360	390	725	7.4	13.0	340	19	60	46
64 54 15	147 36 29	01	79-09-26	70	100	600	6.8	9.0	310	69	85	23
64 54 33	147 22 45	01	79-07-28	267	422	840	7.1	5.0	410	61	70	58
64 54 47	147 55 49	01	79-08-24	15	30	450	7.5	4.0	240	38	59	22
64 55 46	148 01 35	01	79-06-28	--	225	170	7.1	7.0	75	6	15	9.1

1/ PRESSURE TANK
2/ PUMPING

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1979

YUKON ALASKA--Continued

FAIRBANKS AREA WELLS--Continued

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
64 53 13	147 37 12	01	79-07-28	--	--	520	--	--	--	--	--	--
64 53 13	147 37 39	01	79-05-18	--	--	630	--	--	--	--	--	--
64 53 13	147 47 43	01	79-01-30	--	--	390	--	--	--	--	--	--
64 53 13	147 51 40	01	79-04-08	--	--	234	--	--	--	--	--	--
64 53 15	147 35 59	01	79-07-28	--	--	380	--	--	--	--	--	--
64 53 15	147 36 46	01	79-05-23	--	--	700	--	--	--	--	--	--
64 53 23	147 38 05	01	79-06-28	--	--	490	--	--	--	--	--	--
64 53 25	147 50 54	01	79-04-10	--	--	240	--	--	--	--	--	--
64 53 27	147 36 55	01	79-05-10	--	--	532	--	--	--	--	--	--
64 53 28	147 37 26	01	79-05-18	--	--	480	--	--	--	--	--	--
64 53 29	147 37 00	01	79-05-23	--	--	640	--	--	--	--	--	--
64 53 32	147 35 25	01	79-06-25	--	--	400	--	--	--	--	--	--
64 53 39	147 36 41	01	79-08-23	--	--	340	--	--	--	--	--	--
64 54 00	147 40 36	01	78-11-08	10	6.3	390	80	1.6	.3	14	400	411
64 54 15	147 36 29	01	79-09-26	--	--	290	--	--	--	--	--	--
64 54 33	147 22 45	01	79-07-28	--	--	430	--	--	--	--	--	--
64 54 47	147 55 49	01	79-08-24	--	--	244	--	--	--	--	--	--
64 55 46	148 01 35	01	79-06-28	--	--	84	--	--	--	--	--	--

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	SELE-NIUM, TOTAL (UG/L AS SE)
64 53 13	147 37 12	01	79-07-28	.00	--	2	--	--	--	--	--
64 53 13	147 37 39	01	79-05-18	3.3	--	0	0	--	--	--	--
64 53 13	147 47 43	01	79-01-30	--	--	3	--	7000	--	--	--
64 53 13	147 51 40	01	79-04-08	--	--	190	190	--	--	--	--
64 53 15	147 35 59	01	79-07-28	13	--	1	--	150	--	--	--
64 53 15	147 36 46	01	79-05-23	.16	--	3	3	16000	--	--	--
64 53 23	147 38 05	01	79-06-28	.07	--	13	13	1400	--	--	--
64 53 25	147 50 54	01	79-04-10	2.0	--	2	--	270	--	--	--
64 53 27	147 36 55	01	79-05-10	--	--	3	--	4700	--	--	--
64 53 28	147 37 26	01	79-05-18	1.7	--	6	0	--	--	--	--
64 53 29	147 37 00	01	79-05-23	2.6	--	0	0	100	--	--	--
64 53 32	147 35 25	01	79-06-25	1.2	--	0	0	160	--	--	--
64 53 39	147 36 41	01	79-08-23	--	--	0	--	540	--	--	--
64 54 00	147 40 36	01	78-11-08	--	.08	18	--	--	460	60	--
64 54 15	147 36 29	01	79-09-26	1.7	--	17	--	4800	--	--	--
64 54 33	147 22 45	01	79-07-28	.08	--	--	--	580	--	--	--
64 54 47	147 55 49	01	79-08-24	--	--	0	--	--	--	--	--
64 55 46	148 01 35	01	79-06-28	.42	--	0	0	860	--	--	--

WATER QUALITY DATA COLLECTED FROM SPRINGS DURING WATER YEAR 1979

SOUTHWEST ALASKA

LAT-I-TUDE	LONG-I-TUBE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	FLOW RATE, INSTAN-TANEOUS (GPM)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
59 04 19	158 26 24a	01	SC01305510BBAA1S 40185	79-06-06	1450	>3000	1.0	90	5.4	5.0

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	BICAR-BONATE (MG/L AS HCO3)	ARSENIC DIS-SOLVED (UG/L AS AS)
59 04 19	158 26 24	01	79-06-06	22	2

a Wood River community spring.

WATER QUALITY DATA COLLECTED FROM SPRINGS DURING WATER YEAR 1979

NORTHWEST ALASKA

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)
67 15 50	155 02 39a	00	KA02201735CB 15 20195	79-08-15	1526	.30	750	6.9	47.5	64

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
67 15 50	155 02 39	00	79-08-15	0	24	1.0	160	12	380	0	53	12

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
67 15 50	155 02 39	00	79-08-15	8.2	85	498	<543	.17	.00	30	70

a Reed River hot spring.

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